THE

SOUTHERN PLANTER.

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. —*Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

FRANK. G. RUFFIN, Editor. F. G. RUFFIN & N. AUGUST, Prop'rs.

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ESSAY ON IRRIGATION.

BY WELLINGTON GORDON, OF LOUISA.

[*A premium of Fifty Dollars.*]

Our agriculture has arrived to the insurpassable state of imperfection of applying its best soil to the removal of the worst farther from market.

Arator.

Nothing has yet been done to wipe from our agriculture the reproach of Arator.

The alluvial treasure, annually washed from our forests and badly cultivated soils, and floated down our rivers, continues to serve no other purpose but to obstruct our navigation and poison our atmosphere. Not one scientific effort has been made to arrest it, in its progress to tide-water, and none to appropriate it below.

Of the amount of agricultural wealth, thus neglected, no accurate estimate can be made;* but if the intelligent people of Virginia would understand and practice *Irrigation*, as, for centuries, it has been understood and practiced by the ignorant peasants of China, Egypt, and of Lombardy, they would discover floating through their lands a treasure more valuable than the Chinchæ Islands, and requiring only a skilful use of the shovel and the spade, to be distributed over their hungry and thirsty soils. They would also learn where Providence withholds from them the early and the latter rains, that there are summer showers in the running brooks.

In dry and arid countries, Irrigation has been coeval with the cultivation of the soil. Famine, to whom more than to science, agriculture is indebted for its discoveries, has been its schoolmaster there. It is not a necessity in Virginia, and is therefore supposed to be unsuited to our climate. It is also believed to require a skill that we do not possess, and an amount of labour, which we cannot spare. The purpose of this paper, in part, is to point out the fallacy of the two last named objections. That of climate might be disposed of, in a more summary manner, but in its consideration an opportunity is presented of portraying the marvellous results of irrigation, wherever practiced, and some tediousness will therefore be bestowed upon it. Premising that, in climate and soil, Lombardy, and especially Venetian Lombardy, very nearly resemble Eastern Virginia, the following extract from the reports of the British Board of agriculture is worthy of attention.

"The waters of the chief rivers of the north of Italy, such as the Po, the Adige, the Taglimento and of all the minor streams, are employed in irrigation. There is no other country which possesses an extent of rich water meadows equal to that of the Lombards. The entire country from Venice to Turin, may be said to be formed into one great water meadow, yet the irrigating system is not confined to grass lands; the water is conveyed into the hollows between the ridges in corn lands, into the low lands where rice is cultivated, and around the roots of the vines. From Italy the practice extended into the South

* The Mississippi has been estimated to deposit eight millions of solid feet per hour. Estimating the deposits of all the rivers of Virginia to be one hundredth part of that of the Mississippi, and that six inches of this deposit is equivalent to a coat of stable manure, the annual loss will be found to exceed 30,000 acres of fertilizing material.

of France, into Spain and then into Britain. In the States of Lombardy the waters of all the rivers belong to the State; in that of Venice the government extends its claims to that of the smallest springs and even to collection of rain water, so highly, for the use of the cultivator, is water of every kind valued in the north of Italy. It is necessary therefore in Lombardy, to purchase from the State the water taken from the river. This may be taken by means of a canal through any person's grounds, the government merely requiring the payment of the value of the land to the proprietor, and restraining him from carrying his channel through a garden, or within a certain distance from the mansion. The water is sold by the Government at a certain rate, which is regulated by the size of the sluice and the time of the run of water—this is either by the hour, half hour, or quarter, or by so many days at certain periods of the year. The right to these runs of water is regularly sold like other property. Arthur Young gives an account of the sale of an hour's run through a sluice near Turin which produced, in 1778, 1500 livres.

The rent of the irrigated lands in the north of Italy is, upon an average, more than one third greater than the same description of land not watered."

The climate of Great Britain, on account of its humidity, would of all others seem least suited to irrigation, but, under an improved practice, its triumphs there have been most complete. A description of some of the most perfect water-meadows of England will be found in "Coleman's European Agriculture" from which the following facts are gathered:

"The water-meadows of His Grace the Duke of Portland at Walbeck at first embraced 300 acres. The value of the land has been raised from the annual sum of $400 (£80) to that of $18,300* (£3660.) The work was undertaken with no view to profit, and was executed in a Princely style of extravagance. The expenditure from the commencement to the completion has been $200,000 (£40,000). The profits upon each acre after defraying all expenses are computed at nearly $60 (£12) per annum, without taking into consideration the great benefit they are to the adjoining arable land. The land before the improvement was commenced, was in part, a thin, gravelly and barren soil, and in part a peat bog or swamp, and full of rushes and aquatic plants. It is now clothed with the most luxuriant verdure, and requires no manure beyond the water with which it is supplied.

Every acre of this irrigated land, in its produce consumed by cattle on the farm, supples manure for five acres of other land. The water here is peculiarly rich in fertilizing matter."

"The water-meadows at Audly End, the residence of Lord Braybrook, are on a comparatively small scale, but extremely productive.

The average produce yielded the last three years has been about thirty-one tons of grass or eight tons of hay per acre. A patch of rye grass measured three feet two inches in height on the 30th April 1844."

The high authority of Phillip Pusey, Esq., is cited in the same work for the following:

"I have known Mr. Roals' farm for many years. It stands alone on the summit of the wild Exmoor range of mountain land. If any one asserted that, for a trifling outlay, he could enable heath-covered steeps to rival in produce or value, the old grazing grounds of Northamptonshire, he would be regarded as a dreamer, but if any owners of moors will visit Somerset or North Devon, he will ascertain the literal truth of the statement, as I did five years ago. All that is required is a streamlet trickling down the mountain side, or a torrent descending rapidly along the bottom of the glen. The profits of under-draining old arable land appears trifling when compared with the profits of thus forming catch-water meadows, which, according to Mr. Roals, is more than one pound interest for two pounds invested. The two pages of this report, which state no more than Mr. Roals has himself done, contain a talisman by which a mantle of luxuriant verdure might be spread over the mountain moors of Wales and Scotland, of Kerry and Cannemara."

In the third volume of Ruffin's Farmer's Register will be found a re-print of George Stevens' practical treatise on irrigation, from which, out of many instances, are cited at random the following evidences of the beneficial effects of irrigation in Scotland and Sweden:

"Kirkhouse meadow, in the parish of Traquiar, contains nine Scotch acres, and was the first scientifically formed irrigated meadow in Scotland. The land, in its original state, was valued at 5 shillings per acre of yearly rent. The formation cost £4 ($20) per acre; but the hay crop for the last twenty years has averaged two hundred and sixty stone (5720 pounds) per acre,* and the after-grass 12 shillings ($3) per acre, making upwards of £7 ($35) per acre grass produce. About the same time an irrigated mea-

* The English pound Sterling is here estimated at $5 instead of 4 83-100ths. The same mode of calculating will be pursued hereafter.

* A Stone weight of hay is 22 pounds, and ranges in price from 12 cents to 24 cents, or from 55 cents to $1,00 per hundred (very much the same in Virginia.)

dow was made at Kirkhope on the Ettrick, and another at Mount Benger Burn, on the Yarrow, which, according to the tenant's own account, pays them better than any piece of land of the same extent on their farms, although the land in its natural state was worth little or nothing."

"The late Sir George Montgomery, Bart of Magleiehill, in Peeblephire, commenced irrigating in 1798 by forming about one acre into water-meadows. This little experimental meadow turned out so productive that the baronet continued operations on a larger scale, by collecting the small streams that ran through his property to aid him in procuring as much natural hay as possible by irrigation. He, therefore, in the year 1815 converted the low-lands at the Plew lands into irrigated meadows. They contain 9 acres, and consist partly of boggy and partly of dry soil, worth £2 ($10 per acre in their original state. The effect of this improvement, for several years past. has been 300 Stone (6600 pounds) of very superior hay per acre, averaging 8 pence per Stone, and the after-grass 20 shillings per acre, which makes the gross produce of the land worth £11 ($55). These meadows have been sometimes cut twice a year, but, owing to the high climate, he found it more advantageous only to cut them once, and commence feeding off the after-grass earlier in the Autumn. The expense of making those meadows was £5 per acre. By this simple method of improvement, fifteen acres of common sheep pasture-land has given the proprietor from three thousand five hundred (77,000 pounds) to four thousand Stone (88,000 pounds) of hay per annum, averaging 6 pence per Stone."

"In the year 1808, I was employed, to survey, with regard to draining, a large tract of boggy land, belonging to Mrs. Grill of Soderfors Iron Manufactory, in the province of Upland in Sweden. After having taken a general view of upwards of three hundred acres, I found about 80, lying nearest the large River Dal, well situated for irrigation; and although there was nothing of the kind in the country previously to that time, the proprietress determined to have, at any expense, an Irrigated meadow formed complete in all its parts, for she was confident, that connected with thorough drainage, it would form one of the greatest improvements to a country where the Summers are so generally dry, and hay very scarce. In 1810 the hay crop on 40 acres was 4000 Stone (88,000 pounds.) Within that year the other 40 acres were formed into water-meadow, and in 1811, the hay crop on the whole was 11250 Stone (247,500 pounds.) In 1812 the crop was damaged by the frost and reduced to 4550 Stone. In 1813 the crop was 11250 Stone, and but for heavy frosts on the 21st, 22d and 23d of June would have been one third more. The hay, since the commencement of the Irrigation is twice as good in quality. The expense of forming this meadow was nearly £4 ($20) per acre, by which it appears that, although the climate of Northern countries is so very much against the practice, yet the improvement is one of the greatest that has been introduced in a district, where it is impossible to procure manure for making improvements in any other way, *and that wherever water can be brought to run over grass land, the benefit will richly reimburse any person for the money laid out.* Since the formation of this meadow, several others have been made in different parts of Sweden with greater success, they being made on better land."

Although the instances cited are not particularly remarkable in their results, it is nevertheless proper to state, that Irrigation has not always succeeded in increasing the crops, but has sometimes resulted in disappointment and loss. The exceptions are rare, and have been generally ascribed to want of skill or attention, or the presence of some mineral in the water injurious to vegetation. They nevertheless inculcate a lesson of prudence and deliberation. The quantity of water, furnished by the stream, should be measured, and its fertilizing qualities ascertained, by observing its effect on inundated spots before the commencement of any extensive enterprise.

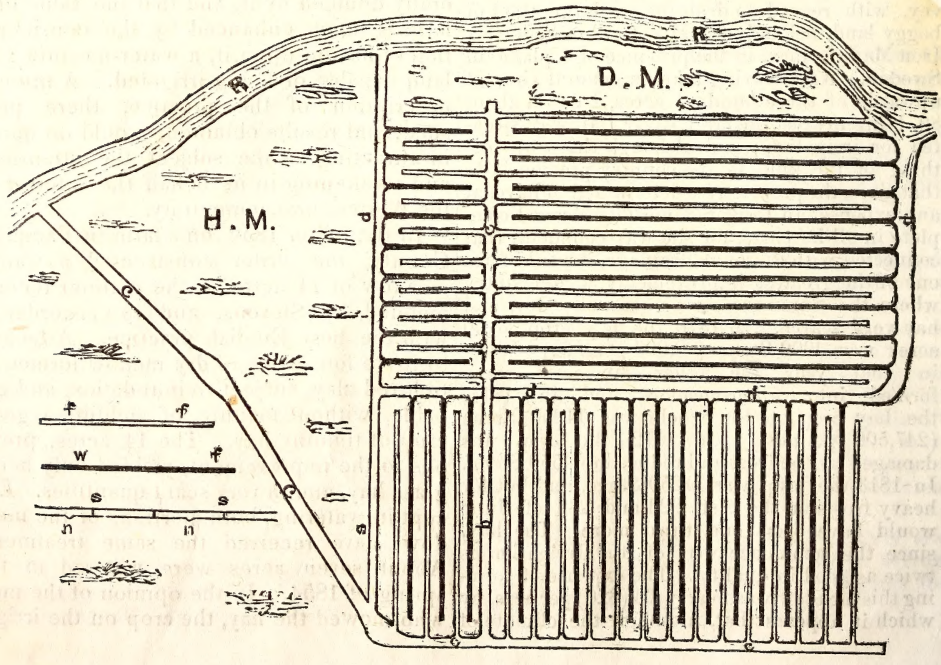
Irrigation has long been practised in certain localities of the Valley of Virginia. The plan, pursued, is represented to be rude and primitive, and yet, on reliable authority the writer is assured that the results have been very satisfactory, that the crop of hay is generally doubled by it, and that the value of a farm is much enhanced by the consideration of having upon it, a water-meadow; or land capable of being irrigated. A minute description of the practice, there pursued, and results obtained, would do much in attracting to the subject the attention, and awakening in its behalf the interest of the Agricultural community.

In the fall of 1852, on a farm in Fauquier County, the writer constructed a water-meadow of 14 acres in the manner recommended by Stevens, and in accordance with the best English practice. Attached to it are four acres of dry medow formed of rich red clay, subject to inundation, and capable, without manure, of yielding a good crop of timothy hay. The 14 acres, previous to the improvement, yielded only herds grass hay, and in very scant quantities. Except in watering, both portions of the meadow have received the same treatment. About seven acres were watered in the spring of 1854. In the opinion of the men who mowed the hay, the crop on the irriga-

ted land doubled per acre that of the dry meadow. It exceeded two tons per acre. The difference in color and growth was observable at a distance of 300 yards. The whole 14 acres were irrigated in the Spring of 1855, though, on account of a drought extending through the previous winter, with an insufficient supply of water. On the first of June, when all the other meadows of the neighborhood seemed parched and withered up, this meadow presented a coat of luxuriant verdure beautiful to be hold, and promised a most abundant crop, which however was reduced more than one half by a violent hail-storm on the 20th of the same month. The watered portion, nevertheless, doubled in product the dry portion of the meadow, and yielded over one ton of timothy hay per acre. The result of the experiment is so satisfactory, that 18 acres additional are now being prepared for irrigation, and the improvement will be extended to every piece of land on the farm accessible to water. In its construction, forty dollars have been expended for hired labour. The remainder of the work was performed by the farm force, at idle periods, which, if charged at it full value, would have increased the expenditure some $80 or $90. The whole cost of construction has certainly not exceeded $150. It should however be stated that the position of the land was unusually favourable for irrigation. The Improvement is believed to have added $75 per acre to the value of the meadow. The crop of hay of 1854 could have been sold on the farm for $300. A sketch of this meadow is annexed. If referred to, it will serve to explain any obscurity in the practical part of this paper.

References.

D. M. drymeadow subject to inundation,
H. M. high meadow too high for irrigation,
B. R. Brown's Run,
m. c. main conductor,
b. c. branch conductor,
s. d. slice ditch,
d. d. d. d. discharging ditch,
a. c. feeder,
w. f. water furrow,
s. s. stops,
n. n. notches.



Irrigation benefits vegetation in three ways. It supplies in dry seasons the deficient moisture. It warms the soil in winter. The Dutch farmers of the valley have a proverb that a sheet of ice on a meadow is a coat of manure. The earliest vegetation will always be found on spots which during the winter have been irrigated by an adjacent spring or stream. It wrests from our streams their mineral and alluvial treasure, and for that consideration, more than for any other, will prove of the utmost service to our Agriculture. A limpid spring will warm the soil and supply the deficient moisture, but if it hold no fertilizing mineral in solution will require the aid of guano, or other manure, or at least a good soil to be acted upon. A stream, which in its course has received the washings of the forest or of cultivated lands, will perform all the conditions of Irrigation, and should be suffered to pass through no farm without leaving some of its plunder behind.

A farmer intending to construct a water-meadow, should provide himself with a spirit level and levelling rod and learn to use them. The rude instruments, sometimes recommended as substitutes, will entail confusion and loss. The art of levelling may be learned, in one-half hour, from any one familiar with the use of the instrument.

It will be more convenient here to define the meaning of certain terms hereafter to be used.

The *Meadow* is the land intended to be irrigated.

The *Discharging Ditches* are deep ditches which serve the purpose of *thoroughly* draining the land and rapidly discharging the irrigating water. They should never be less than three feet deep.

The *Main Conductor* is a small mill race, which receives the water from the stream and conducts it to a position from whence it may be delivered on the whole or a part of the meadow.

Branch Conductors receive the water from the main conductor and place it in a position to be delivered on parts of the meadow not convenient to the main conductor, they should never be constructed until the meadow has been graded and well set in grass.

Beds are subdivisions of the meadow, generally 30 feet wide. They always start from a conductor and terminate at a point convenient for the delivery of the water into a discharging ditch or stream.

Feeders are narrow channels cut through the combs or highest points of the beds. They serve the purpose of supplying the beds with water and of equally distributing it.

Notches are small openings in the banks of the conductors, through which the feeders are supplied with water. Notches are also sometimes cut through the sides of feeders to distribute the water over the beds.

Sluices are large notches in the banks of the main conductors, through which the branch conductors are supplied with water.

Puddle or Puddling, is any kind of pure earth moistened and worked to a stiff batter.

There are three kinds of Irrigation. 1st. Irrigation by passing a current of water over the meadow termed *Current Irrigation.* 2nd. Irrigation by wetting the land, termed *Irrigation by Absorption.* 3*rd. Irrigation by Flooding.*

Current Irrigation

Is the most profitable in its results of all kinds of Irrigation. It also requires more skill and care in its execution. A knowledge of Current Irrigation embraces every thing necessary to be learned, to enable the farmer to practice either of the other branches, and will therefore be more particularly the subject matter of this paper.

Precautions.

Having ascertained, with a spirit-level, that the water may be drawn from the stream, at an elevation of at least one foot above the highest point of the meadow, and having traced off the conductors and ditches, the farmer should prepare a careful estimate of the probable cost of the enterprise before he incurs any other expenditure. If, after much reflection, he is satisfied that the outlay will not exceed 50 dollars per acre, he may safely make the adventure. The ditching follows next in order.

Ditching.

The discharging ditches should be located upon the lowest points of the meadow. They should be 2 feet wide at bottom, at least 3 feet deep and have a fall sufficient to discharge the water with rapidity. All springs or wet places must be drained by secret ditches, terminating in the discharging ditch or stream. Broken stone, or cedar branches, or pine poles, are the best materials for secret drains in Virginia. Pipe or tile require a nicety of foundation seldom attainable under our slovenly system of agriculture. In filling up the secret drains,

six inches of straw should be placed over the drain, then pure earth, worked fine with the spade, to within 18 inches of the surface, then *one foot of puddle*, well worked in with the spade, and the remainder of rich soil. If puddle be not used, as above directed, the water of Irrigation will sink through the secret drains and destroy them.

Water meadows require the most *thorough* drainage. Without it, the grasses become sour and coarse. It is important that the water be not only rapidly delivered on the meadow, but also that it be rapidly discharged from it.

The Main Conductor.

To find its connecting point with the stream, proceed as follows. Start from the highest part of the meadow, and continue the level up stream until a point, in its bed, is reached one foot higher than the point of departure. Run this level at least twice, for an error here may be incurable. The water should be drawn from the bottom or bed of the stream, because it can in no other manner be effectually husbanded.

If a sufficient head of water cannot be had without a drain, it will be advisable in most instances to abandon the undertaking.

If the large area to be watered will justify the expense of a dam, it should be located and constructed under the supervision of a canal engineer.

Start the main conductor from the point above designated and continue it on the same level until it reaches a position from which it may readily deliver the water upon the whole or a part of the meadow. It should, if possible, be laid parallel with the meadow and on ground one foot above it. (*See p.* 164 *ante.*)

Though a fall of one foot in every 200 yards is usually recommended, it will nevertheless be found better economy to increase the width of the conductor, and thus avoid the necessity of a current, and of waste wiers, and sluice gates. In England much expense is incurred in sluice gates and masonry, which, by keeping the conductor on a level and observing the following precautions may be all avoided :—The bottom of the conductor should be one foot lower than the bottom of the stream, and at least two feet lower than its surface. It should also be not less than two feet wide at bottom and six feet wide at the surface level of the water. If of the above dimensions, it will pass a sufficient supply of water for 15 acres of flat bed meadow, but the conductor cannot well be made too large, for, during a freshet, too much water cannot be delivered on the land.

It should, when practicable, be located, for its whole length, through cutting, that is to say, its sides should be formed of natural earth, and not of embankment, which is liable to leakage and injury by muskrats and freshets. Locate the conductor in such a manner that on its lower side the natural earth will be at least one foot higher than the usual level of the water, and be diverted from this purpose, neither by the temptation of straightness, economy, or any other consideration. Shovel back, as far as convenient, all loose earth from that part of the conductor not adjacent to the meadow. The lower side of the conductor will then, during freshets, act as a waste and effectually guard the embankments from injury.

Where embankment is unavoidable, use the following precautions.

The width of its base should be four times its height. If, for instance, the embankment be two feet high, its width at base should be 8 feet. Scrape from the base every particle of vegetable matter, and spade up the soil to a depth of one foot, then build on the foundation ; thus prepared, the embankment, which must be made of pure earth, well worked with the spade and moistened, if water be convenient. The sides to have a very gentle slope, and the top to be *at least* 2 feet higher than the surface level of the water. The main conductor serves a similar purpose, and resembles, in every particular, a canal or mill race, and requires the same care in its construction. The precautions above stated cannot therefore be safely neglected. On account of its small dimensions, its cost rarely exceeds that of a large ditch, for the particular care demanded in its construction, involves no great expenditure of money. A small wooden guard gate is sometimes placed at the head of a conductor: but, except there be a dam, it will seldom be needed. A good substitute for a waste, or sluice gate, will be found in a ditch starting from a conductor at the point of its connection with the meadow and terminating in the discharging ditch or stream. (*See p.* 164, *ante,*) The opening from the conductor into the ditch (termed a sluice ditch,) is closed with earth, except where the meadow is laid dry or during high freshets.

Branch Conductors.

Are intended to furnish a supply of water to parts of the meadow not adjacent or

convenient to the main conductor. If there be a ravine or ditch between the main conductor and any portion of the meadow, a branch conductor will be thrown across them. Wooden trunks are placed in them and embankment over the trunk. The conductor is thus guided over without obstruction to the drainage. Embankment is unavoidable in the construction of branch conductors, and requires the care and precautions before stated. Branch conductors should be constructed after the meadow has been graded and seeded with grass, for their proper position cannot sooner be ascertained.

The connection between the main conductor and the branch conductors, is closed by embankment and opened with the spade, according as it is intended to let on or shut off the water —(*See sketch, p.* 164 *ante.*)

Beds.

No meadow is ever, by the hand of nature, shaped and graded for current irrigation. In the most favored cases there are elevations to be shaved off and depressions to be elevated. The land is laid off in sections about 30 feet wide, and as long as the position of the surface will permit.

Each of those sections, termed *Beds*, is a perfect water meadow in itself, and except in having a common conductor and a water furrow in common with its adjacent bed, has no connection with the other beds. It is provided with its conductor notch, its feeder stops, and feeder notches may be watered when the rest of the meadow is laid dry and laid dry when the rest of the meadow is watered. It may be on the same, or on a different plan, from the other beds and also of larger or smaller dimensions. They must all start from a conductor, have a continuous, though not necessarily an uniform inclination, in the line of their direction and terminate in a discharging ditch, or a depression leading to a discharging ditch or stream. The plan of shaping and grading them, as recommended by Stevens, and generally adopted in England, will be first described. An important modification, the merit of which has been tested by careful experiments, will then be proposed.

The following extract from "Steven's will explain his plan.

"The earth excavated from the drains and conductors is used for filling up low places. The next part of the process is to divide the portion of land of the meadow, which is assigned to each conductor, into regular beds. Where the soil is naturally dry and the supply of water plentiful, they might be made 40 feet wide, but when the subsoil is cold and impervious, their breath should never exceed 30 feet, and be even less in deep mossy soils The feeders are made in the middle of the beds, (always branching out at right angles from the conductors,) except in cases where the ground falls two ways, when it will be necessary to make the feeders a few feet nearer the one side of the bed than the other. The feeder should always be placed on the highest on the highest part of the bed. A bed 200 yards long will require a feeder, where it leaves a conductor, twenty inches wide, gradually decreasing in width to 12 inches at the farthest extremity, for the quantity of water becomes less and less by overflowing over its sides. The earth taken out in forming the feeders is to be placed on each side, in such a regular manner, as to form small banks with a gradual descent towards the drains. In forming the feeders, care should be taken to leave stops or small portions of solid earth in them, about 6 inches wide, at regular distances from each other, or, according to the fall of the ground, to obstruct and keep up the water to a proper height, so that the whole length of the bed may be regularly watered without the assistance of notches; as recommended by Wright and others. Indeed, the contraction in the width of the feeders serves to raise the water over their sides, but this is not sufficient when the descent is considerable.

Stops and notches have been thought indispensably necessary in the formation of water meadows, therefore several writers on the subject have recommended stakes to be driven into the conductors and feeders, to retard the velocity of the water, but, if a water meadow is properly laid out, few stops will be necessary, and, in situations where they cannot be avoided, the last method is to put in a few stones or sods. Wherever notches are found in a water meadow, it is a sure sign of an imperfect formation. Having completed all the feeders which are necessary to introduce and spread the water, a drain or water furrow must be made between every two beds parallel to the feeders. The drains are made in an order the reverse of the feeder, being narrowest at the upper parts of the meadow and gradually increasing in width until they descend into the main drain.

The depth of these water furrows in all soils should be so regulated, that they free the surface from the stagnated water, but in moist soils, with retentive subsoils, the depth at the upper end should be never less than 6 inches and increasing to nearly the depth of the main drain, when they discharge their waters, and the width exactly the reverse of the feeders. Having thus completed the formation of the various conductors, drains and feeders, let in the water and after giving each part its due quantity and regulated the stops in the feeders, (beginning with the one next the head or upper part of the meadow and continuing the same way over the whole until the water runs an equal depth over the sides or banks of the feeders),

it would very soon show such places as are too high or hollows necessary to fill up. The stuff taken out in forming the water furrows, drains and conductors with what is gained by reducing high places, is generally enough for levelling the beds to keep the water in constant motion, but the nearer the beds are brought to an inclined plain, the better for the purpose of irrigation. When the land is very unlevel with a thin sward on it, I would recommend every proprietor to plough the whole and take a crop of oats before forming it into water meadow. If tne sward or grass is strong enough to be lifted, to lift the turf, and form the subsoil with the plough or spade and lay the turf down again. *In either of these cases the beds should be raised* 12 *inches in the centre.* Whenever the whole surface of a piece of the ground is broken to be constructed into an irrigated meadow, the formation should be done with the greatest nicety, for the greater the pains that are taken at the first forming, the easier the management will be ever after."

The directions given by Stevens for shaping and grading the beds have been verbatim, that, if they should seem better than the substitute about to be proposed, they may be adopted by the farmer. The beds, recommended by him, and here termed for distinction "Elevated beds" (being one foot higher at their centre than sides) are in many respects objectionable. They are very difficult to water if over 200 feet long and of rapid descent. They consume an immense quantity of water, (of which at certain seasons there is a scarcity) and, consequently, require an expensive conductor. They must pursue a straight line, (whatever be the shape of the ground) for a crook in the feeder will prevent a sufficiently free passage of water through. They require feeders, stops and feeder notches, which are but imperfect devices to remedy an imperfect plan. They will not work on a side hill at all, and will prove next to useless where the descent exceeds one foot in ten feet.

These objections to elevated bed irrigation in England are of much less importance than with us. The streams there are but little affected by drought, and consequently a scarcity of water is seldom experienced. Feeders and stops are defective not because they cannot distribute the water, but because they require constant supervision. For side hills or steep descents, a substitute is found in a plan termed "*catch-water Irrigation*" hereafter to be described. It is not claimed for flat bed irrigation, that it will accomplish more than elevated bed Irrigation, but that it will perform as much with less water, less labour and less superintendence.

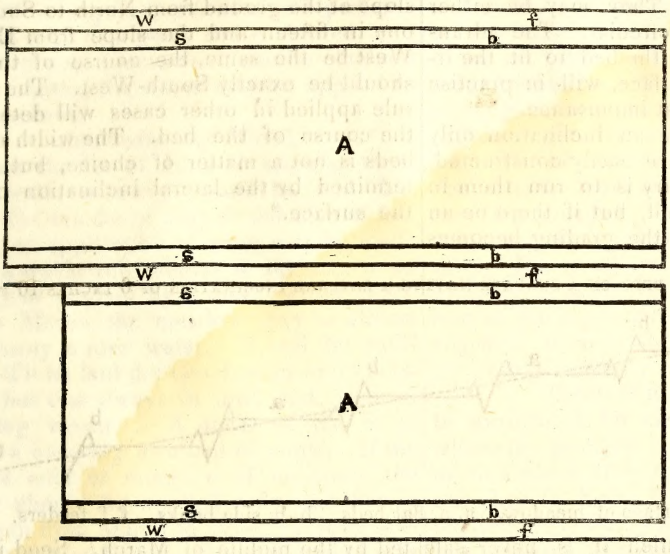
If an elevated bed be 30 feet wide, the fall from the feeder to the water furrow will be one foot in fifteen feet. There is therefore a strong tendency of the water to escape at once into the furrow, where it is lost for the purpose of Irrigation. If the longitudinal inclination of the bed be considerable, this tendency is much diminished, but the same object may be attained, by diminishing the lateral inclination. If a bed be elevated at the centre 6 instead of 12 inches, the lateral inclination will be reduced one half, and if it be not elevated at the centre at all, or in other words, if it be reduced to a perfect level laterally, the whole tendency of the water will be in the line of the length of the bed. A drop of water delivered upon the upper extremity of the bed will pass to its lower extremity without the aid of a feeder or any other device. This is the purpose of flat bed Irrigation.

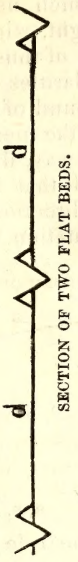
Flat Beds

are designed to prevent any waste of water into the furrows. They must therefore be perfectly flat or level laterally or in the line across them. In the line of their length, or longitudinally, they must, like elevated beds, have a continuous inclination. They must also have, on either side, *deep* waterfurrows to receive the water absorbed by them and to dry them when the water of Irrigation is cut off. In theory they must be made *perfectly* flat laterally, but in practise a perfect level would be made difficult to obtain, and more difficult to maintain. It may be disturbed by the slightest settlement in the land, or by the hoof of cattle, and when once lost, the water will further increase the irregularity. A remedy for this inconvenience will be found in a small bank 6 inches high raised on both sides of the bed and adjoining the water-furrow. The earth from the water furrow will be sufficient to build the bank, which should be sodded at the time of its construction, though the precaution is not absolutely necessary. This bank, running on either side of the beds for their whole length, confines all water received from the conductor, and compels it to follow the course of the bed. It also serves to correct all inequalities in

the beds not exceeding six inches, and therefore dispenses with the necessity of a perfectly flat bed. Nevertheless the beds should be laterally as nearly flat as they can be made, by the eye, and constructed as if no side-banks were contemplated. The banks should then be attached, as if grading had been performed in a slovenly manner.

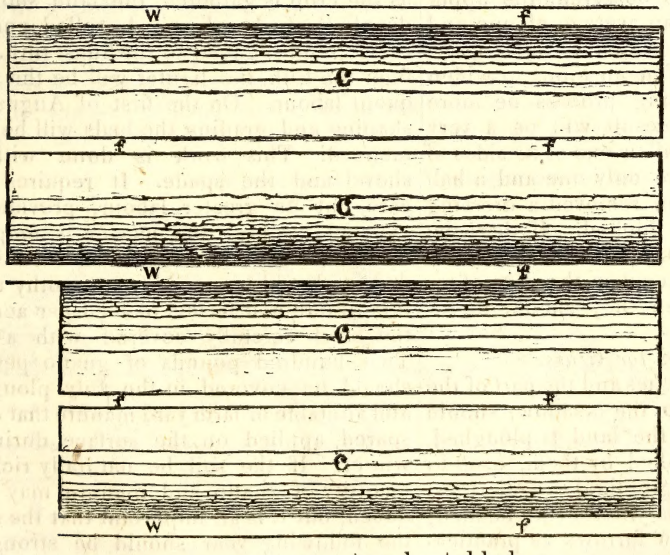
PLAN OF THE FLAT BEDS.

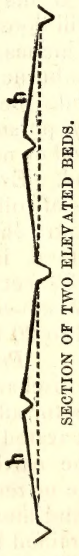




a. a. flat beds,
w. f. water furrows,
s. b. side banks,
d. d. end section of flat beds.

PLAN OF TWO ELEVATED BEDS.



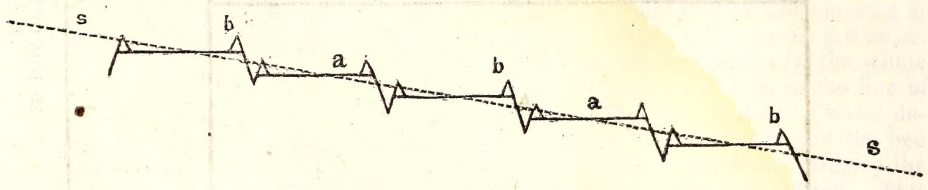


c. c—c. c. two elevated beds,
f. f. feeder,
w. f. water furrows,
h. h. end section of elevated beds

It has been before remarked, that elevated beds must pursue a straight course, because a bend in the feeders would prevent a free passage of water through them. Flat beds, for obvious reasons, are cramped by no such necessity. They may be either straight, zig-zag or circular. The advantage, of thus twisting the bed to fit the irregularities of the surface, will in practise be found of the utmost importance.

If the meadow have an inclination only one way, flat beds are easily constructed, for all that is necessary is to run them in the direction of the fall, but if there be an inclination two ways, the grading becomes a nice and sometimes a laborious operation. Much may be accomplished by giving a proper direction to the bed. It must take the course by which the lateral inclination will be most reduced. If, for instance, the slope of the ground from North to South be one in fifteen and the slope from East to West be the same, the course of the bed should be exactly South-West. The same rule applied in other cases will determine the course of the bed. The width of flat beds is not a matter of choice, but is determined by the lateral inclination of the the surface.*

SECTION OF FIVE FLAT BEDS ON A SURFACE HAVING A LATERAL INCLINATION OF 6 INCHES 10 FEET.



s. s. natural surface of meadow, a. a. flat beds, b. b. side banks, f. f. feeders.

The rule (from which it is never safe to depart) is, to lay off at least one bed for every six inches of lateral fall; and the reason is obvious enough. One half of the bed must be reduced and the other half elevated. The upper half must be skimmed of its soil to elevate the lower half. If the rule be observed, the upper half will loose only an average of one and a half inches of soil, which in most cases can be borne; but, if in an effort to widen the bed, the skimming process be more deeply pursued, the result will be a very thin sod or no sod at all or one of its sides of the bed. Even where only one and a half inches of soil has been removed a dressing of manure should be applied. If there be no lateral inclination, flat beds may be made 30 feet wide except in the case of retentive sub-soils, when they should be reduced to 20 feet.

Preparation for Grass.

The discharging ditches and the part of the conductor adjacent to the meadow, should be excavated before the land is ploughed, and the earth, furnished by them, used to remove or reduce longitudinal irregularities. The land must then be *flushed* (not bedded) and drained by as few furrows as practicable. This work is supposed to be completed by the middle of March. Seed it then with 2½ bushels of Oats per acre, and make a liberal application of guano whether the soil be rich or poor. The crop of Oats is intended to smother up and destroy the natural grasses. It must therefore be as thick and luxuriant as it can be made. As soon as the crop is gathered, the land should be deeply flushed, sub-soiled, rolled and harrowed, and reduced to the finest tilth. The finer the tilth, the lighter will be the subsequent labour. On the first of August, the shaping and grading the beds will be commenced. This work is done with the shovel and the spade. It requires great care, but no greater labour, provided the eye and head of the master is employed upon it. As soon as any one bed is graded, it should be seeded in timothy at the rate of one-half bushel of seed per acre and the seed carefully covered with a rake. Two hundred pounds of guano per acre should be covered in the July ploughing, and all stable or farm yard manure that can be spared, applied on the surface during the winter. If the soil be naturally rich, the quantity of guano and manure may be reduced, but it is all important that the sod of the following year should be strong and thick, and no expense must be avoided to

* Where a meadow has a lateral inclination, each bed will be on a different plan, (See plan above.)

obtain it. Guano acts on timothy as favourably as on wheat. Of course no small grain should be seeded with the timothy. Irrigation will not create a sod, for water can only be applied to a sod already formed, but will strengthen, thicken, and preserve it. As soon as a good sod is formed, and by the above directions, it can be obtained in 12 months, the water may be applied to the meadow.

Application of Water.

From the 1st of June to stacking time, every water meadow should be laid dry. From the middle of July to the 15th of October, an application of water may be made once a week, and oftener if the stream be muddy or swollen by a rain. From October to March the meadow may be almost constantly under water. It will be sufficient if it be laid dry two days in every fourteen, but this always in mild and never in freezing weather. A sheet of ice is as warm a covering as a bed of snow. If the soil be cold or retentive of moisture, the water should be applied only one day in fourteen from March to June. If it be sandy, the application during that period may be once a week.

Soils suited to Irrigation.

The best are porous soils based on porous sub-soils. Such is the character of the lands in Lombardy and of some of the best water meadows in England. The more water a soil will absorb and digest, the better for irrigation. It is doubtful whether a thin glady soil based on a tenacious sub-soil will be much benefitted by irrigation, except so far as it deposits alluvial matter upon the surface. All other soils will be more or less benefitted according to their capacity of absorbing and filtrating water.

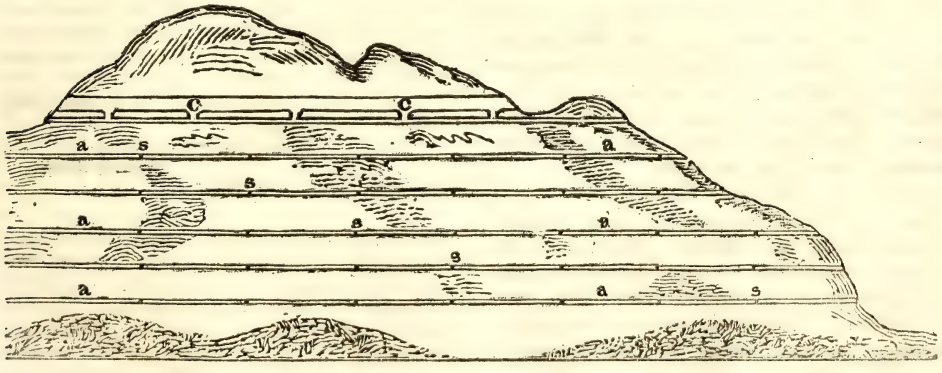
Value of meadow and grass lands.

A meadow on tide water yielding, without manure, 2 tons per acre would nett $26, and should rent for $20 per acre. So also at any other point accessible to market. From no other crop can the like annual profit be realized. The highest priced lands in Virginia are the grass lands, and this without regard to their distance from market. The best arable lands in England seldom rent for more than $25 per acre. The best dry meadows for $40, and the best water meadows often range over $65 per acre. The meadows near Edingburg (irrigated with sewer water,) yield an average rent of $150 per acre, and in years of scarcity have risen to the high figure of $285 per acre per annum.

Catch-Water Irrigation

Is substituted for elevated bed Irrigation, where the meadow is located on a side hill, or on a plane of a greater inclination than one foot in ten. The conductor here is planted immediately above the meadow, and in a position to command every part of it. The water furrows are the feeders. They are wound around the hill and graded to a perfect level from one extremity to the other, or where they are divided into sections, from one stop to another. They are generally separated by a bed 40 feet wide. The water is first delivered from the conductor into a water furrow or feeder, over the sides of which it flows and is equally distributed over a bed, from which it is again received into a feeder, again distributed over a bed, and so on to the bottom of the hill.

PLAN OF A SIDE HILL OR CATCH-WATER MEADOW.



c. c. conductor. a. a. a. a. feeders.

s. s. s. stops.

Catch-water Irrigation, though easy of construction, requires constant supervision, for if the water find for itself the smallest channel, it will soon convert it into a gulley or ravine. Flat bed Irrigation is as applicable on a side hill as on a plane of moderate inclination. Care, however, must be taken to bend and wind the bed to as moderate a lateral inclination as the surface will permit, to execute the lateral grading and side banks with much nicety, and to apply the water in very limited quantities. No sod on a steep side hill can long withstand a strong current of water.

Irrigation by Absorption

Is designed to supply the soil with the deficient moisture. It is seldom practiced except on land under cultivation and recently pulverized. It is very much followed in Italy in the cultivation of rice and grain crops and could no doubt be advantageously introduced in the cultivation of corn upon the sandy flats of tide water. In Egypt it is of more ancient date than the Pyramids and is still there of common usage, as also in Persia and India. From a passage in Isaiah, the Jews seem to have regarded "a garden that hath no water" as a picture of desolation.* If introduced in our garden culture, vegetable famines like that of 1854 might be avoided. The practice is very simple. The conductor, (which in garden culture need be not much larger than a water furrow,) is constructed as before directed. The land is laid off in beds 5 or 10 feet wide, the water furrows graded to a continuous but gentle inclination and stops placed in them 10 or 20 feet apart, according to their rapid or gentle descent. The water is passed from the conductor into the water furrows, and absorption and capilliary attraction do the rest.

The beds require no grading, but should not at centre be more than one foot higher than at their sides. Irrigation by absorption will not on the same surface consume one-tenth of the water required in Current Irrigation. The main conductor need not, therefore, be of half the size.

Irrigation by Flooding

Is practiced only on dead levels, or planes, of very gentle inclination. It is an indifferent substitute for Current Irrigation and should never be performed when that may be adopted. The whole art consists in surrounding the meadow by tight and carefully built embankments, and providing sluice gates through which the water may be delivered on or discharged from it, according as it is intended to flood or lay it dry. It may at some future day be found useful in the cultivation of rice, or grass, on our tide water swamps if the problem of reclaiming them, or of appropriating our alluvial wealth below tide water, shall ever be solved.

Legislation needed.

Irrigation can never be extensively practiced in Virginia, until the privileges, now enjoyed by parties proposing to drain their lands, shall be extended to those intending to construct a water meadow. The head of a conductor, like the tail of a ditch, must be often located in the land of a neighboring proprietor, whose voluntary assent to the entry and appropriation will rarely be obtained. The privileges conferred by chapter 124, page 528, Code of Virginia, would seem as necessary in the one case as in the other. The writer would, therefore, in conclusion, respectfully call to this branch of the subject, the attention of the Agricultural Society of Virginia.

* In the book of Genesis we read, "A river went out of Eden to water the garden."

GAPES IN CHICKENS.

My experience in raising chickens teaches me to keep the hen house clean and regularly swept; to visit the yard and keep that swept out also for the space of five or six yards around the house, taking care that neither grass or weeds grow there during the year, and to smoke the hen house repeatedly during the summer. As soon as my chickens are hatched in the spring of the year, say March, I begin to smoke my young chickens every morning with strong tobacco smoke until they are almost large enough to fry. My mode of smoking is to have hovels large enough for one or two hens and their broods, not more; I have a trap door at one end of each hovel, and make the smoke close enough to the door just so as not to burn the hovel, then you will have room in the other part of the hovel not to burn the chickens. So treated, they will never have the gapes.

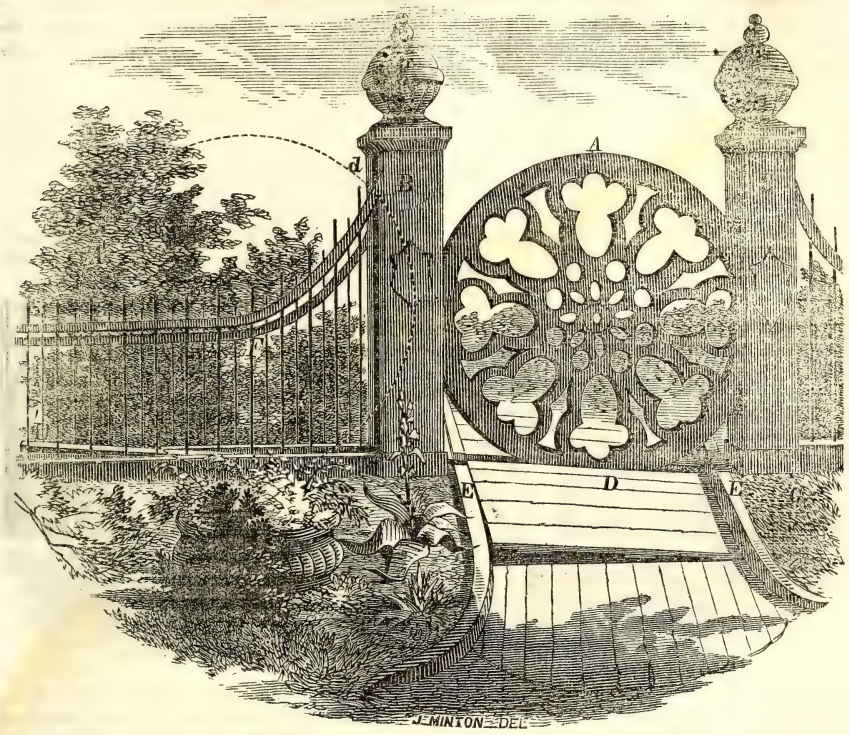
Your obedient servant,

ROBERT KENT.

Fluvanna Co. April 2, 1856.

The above remedy of our correspondent may be a very good one; we have never tried it. We have recently heard of another which is said by a lady who raises more chickens than any one we ever heard of to be completely efficacious. It is simply to mix onions or garlick, or wild onions, if the other cannot be had, copiously with their feed. The onions to be finely chopped up.

Fig. 1.



CIRCULAR SELF-ACTING GATE.

PATENTED TO WILLIAM THOMPSON, OF NASHVILLE, TENN., JUNE 19, 1855.

The above engraving is a perspective view of the gate. The invention relates to gates for farms, parks, and enclosures of any kind. A is the gate closed. It is perfectly circular in form, and may be made of any proper material, and of any size desired. B and C are the gate-posts, secured firmly in the ground, or to any proper supports. The left-hand post, B, has a channel, d, entirely through it, from the cap-piece to the bottom. The right-hand post, C, has a channel in it, but not entirely through it, to receive a part of one side of the gate, and retain it when the gate is closed. The gate A. rests upon a rail, D, sunk in a platform, a little below the road-way, in the middle of the track, but elevated on one side and extending some distance to the left. The platform rests upon a lever, and extends both in front and back of the gate. On the rail, D, which is firmly fastened to the platform, the gate operates: the fulcrum on which the platform rests is next to the short end of the rail upon which the gate rolls, and the platform has a weight, G, at its edge, sufficiently heavy to keep the short end of the rail upon the ground, and consequently the long end, D, in an inclined position, as shown in the above engraving. When a person or carriage shall be on the platform, approaching the gate, the weight will depress the left edge of the platform and the now elevated end of the rail, D, fastened to it, and the gate will roll into the position shown in the dotted lines, A^1, giving way for the person or carriage to pass; and when the carriage or person shall have passed off the platform on the other side, the weight, G, at the edge of the platform, next to the short end of the rail, causes that end to be depressed, and the gate rolls back and shuts itself. It is seen that the gate, when rolling out of the way, passes between the double fence, F. E is a railing on the side of the platform, which can be used or dispensed with at pleasure.

The inside corners of the posts, at the ground, may be extended as close to the gate as possible, so as to fill up the space between the gate and the posts, to prevent hogs, etc., from passing through. These spaces can be readily and neatly filled up.

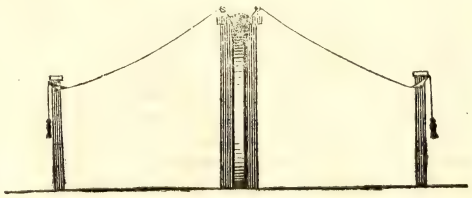
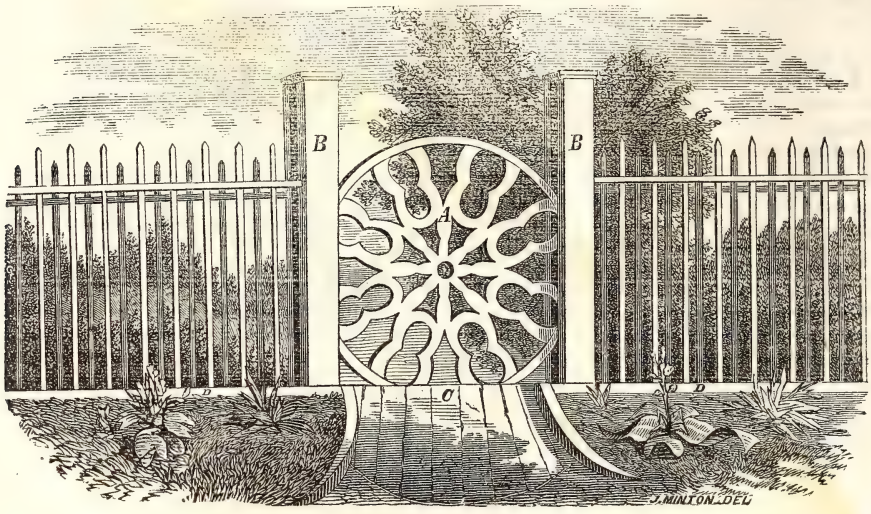


Fig. 2.

Figure 2 is a catch, or fastening, placed on

top, or near the top, of the gate-posts, to be used in case stock casually open the gate. The string would have only to be pulled by the carriage driver, or any one else passing, which could easily be done; and, the catch being raised, as soon as the weight pressed upon the platform the gate would roll out of the way; and after the gate shall have passed off the platform, in rolling back to its position it will lift the catch, which falling in its place as the gate is closed, keeps it shut, till a passing weight and pull of the string shall again cause it to open.

Fig. 3.



The operation of the gate, as illustrated in Figure 2. will be at once understood on inspection. It operates in a groove in the beam or platform, D, which is deepest in the centre, C, where the gate rests when it is shut, and rises to both the right and left. It is rolled out of the way by hand, and, when let loose, returns to its position, and shuts itself. It rolls between the double fence, to keep it in place. Instead of the difficulty of keeping a yard-gate shut, this gate, with fair play, would never remain open.

To let the rail and platform be made firm and immovable, the gate, as represented in Figure 1, may be made to operate, when opened by the hand, as does Figure 3.

PREPARING FOOD FOR FARM STOCK.

In the January number of the *Valley Farmer* we gave an article under this head, in which we incidentally alluded to one of the most improved mills for grinding corn and cob meal that we have seen; this has called forth in reply several articles on the subject, from the advocates of, and dealers in other mills. In these articles, opinions upon the subject of digestion are advanced at variance with science and the natural laws of animal physiology.

Mr. L. Bollman, editor of the agricultural department of the Indiana *Journal*, takes the subject up, and in proof of his own opinions quotes Mr. Youatt, and says: "Our authority is best," &c. If our friend of the *Journal* quotes Youatt correctly, he (Youatt) is certainly in error, as we shall attempt to show; nor is this the only error Mr, Y., has published in his various works on domestic animals. In proof of our argument we will give authority which the scientific world will admit is still better—Dr. Carpenter and Flourens.

As the preparation of food for economical feeding of farm animals is becoming a matter of great importance to our Western farmers, we will give Mr. Bollman's article in full, and in order to dispose of the question in controversy, we shall answer at length, although it will occupy more space in our columns than we should feel willing to devote to a subject of less importance. The following is what Mr. B. says on the subject:

"The idea here advanced is that corn and meal when eaten by ruminants pass directly to the fourth stomach, unless mixed with coarser food. Will the *Farmer* give us its authority for this opinion? But conceding its correctness, we ask whether the gastric juice of the fourth stomach is not a sufficient solvent to digest the coarse meal of the crushers. We know it cannot act upon the whole grain, because it has no power over the silicious coating of the unbroken grain.

If the corn is ground into "*fine* meal," can it be chewed any finer? If not, why the necessity of mixing it with cut and moistened hay?

The process of digestion in ruminating animals as stated in these extracts, did not accord with our recollection, but having killed a beef a short time since, to which we had fed *corn in the ear*, we examined the paunch or first stomach, and found the corn, both the broken and unbroken grains,

and the cob, both in pieces and finely chewed, everywhere mixed with the hay and grass which the animal had eaten. If, then, the corn and cob, after being crushed by the jaws and teeth pass into the first stomach, why will it not after being crushed by the iron teeth of a mill?

We proceed to state what is the true digestive process of ruminants, as the ox, sheep, &c., and our authority is the best, Mr. Youatt.

The throat or gullet, or as it is technically called, the *esophagus*, forms a canal from the mouth to the entrance of the fourth stomach. Along the base of this canal are openings into the first and second stomachs. Immediately under the first opening, is the *rumen* or first stomach. "*All* the food," says Mr. Youatt, "when first swallowed, goes there to be preserved for the act of rumination, and a portion, and occasionally the greatest portion, of the fluids that pass down the gullet, enter the rumen." In the calf, this opening "instinctively closes by an act of organic life," when it swallows the milk; and it is not the *form* of the aliment or food, or the force with which it descends the gullet, that causes it to pass into the rumen of the older animals.

After being received into the first stomach, the food traverses every portion of it, without being changed; except softened and covered with some mucous, and as it approaches the opening through which it passed into it, it is forced through another opening into the *reticulum* or second stomach. The *Valley Farmer* says that it does not enter this stomach until it is chewed the second time, upon what authority we do not know. The office of the second stomach is to force the food back through the opening into it, into the gullet, which carries it back to the mouth, to undergo the second chewing, or as it is called, chewing the cud. In the process, it is thoroughly masticated, and being again swallowed, it passes into the *manyplus* or third stomach. The business of this stomach is to reduce the food to a pulp, in which form it passes into the *abomasum* or fourth stomach. This last one secretes the gastric juice, which digests the food by its chemical action, and converts it into *chyme*. The gastric juice, as we have observed, does not act on the thin outer covering of the grain of corn. Hence if it reaches the fourth stomach whole, it will not be digested, but must be evacuated whole. If it is broken, it will be digested, unless taken in such large quantities that there is not enough of gastric juice to dissolve it. Every feeder knows that many grains are not broken in process; hence the use of mills to aid mastication. If these mills leave the meal with "sharp and flinty corners," so does the crushing operation of the teeth. This we know from what we observed in the paunch we examined. But these sharp corners are softened, they are covered with mucous and are dissolved by the gastric juice, and cannot, therefore produce that intestinal derangement spoken of by the *Valley Farmer*. Improper feeding, colds, or other causes, produce them—if not, then long since would the feeders, who used crushers, have seen the deleterious effect of the sharp cornered meal.

The only grinder which the Editors of the *Farmer* have seen, that will grind corn and cob meal fine enough, is that of Mr. Straub of Cincinnati. They qualify this expression with the phase "*at one operation*," but what it means we cannot tell—whether at one handling or but one grinding. Have they seen *Fetlon's Portable Mill?* It grinds superfine flour, and superfine meal too; so fine that a dozen mastications could not make it finer. So we challenge you, *Mr. Farmer*, with a *Felton* against your *Straub*; the contest to come off at our next State Fair, which as it has thrown open the premiums to be contested by every body, will be an inducement for Mr. Straub "to be and appear."

The writer after conceding our first proposition, asks: "whether the gastric issue of the fourth stomach is not a sufficient solvent to digest the course meal of the crusher." To this question we would first reply, that experience and observation around the barnyard where this meal has been fed, emphatically answers No. But a more conclusive answer is found in the wisdom displayed by the Divine artist in providing the animal with that complicated and beautifully arranged digestive apparatus, no part of which has been formed in vain. Gross food when given to a ruminant in a form that prevents it from passing through all the various processes of digestion cannot be fully prepared for perfect assimilation. The changes which the fluid secreted by the various departments of the digestive apparatus produce on alimentary matter, is by solution and chemical action. Now digestion cannot be perfect unless the food is given in such a form as to force it to take that course in its downward passage as will cause it to pass through all the various forms of digestion, each of which contribute their proper fluids to prepare it for the perfect action of the next.

The first process towards digestion, is mastication; this is not merely to crush the food and reduce it to a pulpy state, but also to imbrue it intimately with saliva. Saliva, so abundantly secreted by ruminants while chewing the cud, performs an essential part in the process of digestion, being in fact the chief agent in the conversion of starch into sugar, or in other words, its digestion. Modern researches have shown, as fully set forth by Dr. Carpenter in his Human Physiology, that it is by this fluid, and not the gastric juice, that the amylaceous elements of food are prepared for assimilation. The change which commences in the mouth, is in a great degree suspended in the stomach, to be renewed when the food passes into the *duodenum*, (or first bowel) where it is mingled with the pancreatic juice, a fluid closely resembling saliva in its properties. Hence the necessity for thorough mastication; hence the advantage of mixing the meal with the hay or straw, which secures its passage into the paunch, or first stomach, and its consequent rumination. When the corn and cob is merely crushed in the iron mills, referred to

by us in our former article, it is too coarse and heavy to adhere to the wet hay or straw to be swallowed with it. And when fed unmixed in this form, or when ground into fine meal and fed either dry or in water in the form of slop, it is not of the *mechanical consistence* which will cause it to open the passage into the first stomach, but passes directly along to the fourth or true stomach unprepared for the final act of digestion and assimilation, just as the milk does in the case of the calf, which comes from the mother already prepared for the final action of the stomach. What are the circumstances which determine the direction of the food? Dr. Carpenter, (Princp. Physiol. Gen. and Comp.) thus describes them: "When the food is first swallowed, it has undergone but very little mastication, it is consequently firm in its consistence, and is brought down to the termination of the esophagus in dry, bulky masses. These separate the lips of the groove or demi-canal and pass into the first or second stomachs. After they have been macerated in the fluids of these cavities, they are returned to the mouth by a reverse peristalic action, the food being shaped into globular pellets by compression within a sort of mould formed by the ends of the demi-canal, drawn together. After its second mastication, it is again swallowed in a pulpy semi-fluid state; and it now passes along the groove which forms the continuation of the esophagus, without opening its lips, and is thus conveyed into the third stomach, whence it passes into the fourth. Now that *the condition of the food, as to bulk and solidity, is the circumstance which determines the opening or closure of the lips of the groove, and which consequently regulates its passage into the first and second stomachs, or into the third and fourth*, appears from the experiments of Flourens, who found that *when the food, the first time of being swallowed, was artificially reduced to a soft and pulpy condition, it passed for the most part along the demi-canal into the third stomach*, as if it had been ruminated—only a small portion finding its way into the first and second stomachs."

Now, as we have before intimated, if the amylaceous food passes without mastication into the true stomach, it lacks, not only the condition, but an important element necessary to its digestion, the saliva, and consequently the digestive process cannot be so perfect. In all probability, the fluids secreted by the paunch, which permeate the alimentary mass, also takes some part in the changes requisite to its assimilation. That there is a necessity in the case of the cow and other ruminants, for the food being temporarily lodged in this great receptacle, is sufficiently proved by the fact that the provision for it exists. The calf requires no such provision, because its food being of a different character, is digested by the gastric juice, and not by the saliva.

Our friend further asks: "If the corn is ground into fine meal can it be chewed any finer? If not, why the necessity of mixing it with cut and moistened hay?" We think in what we have already said, these questions are, or should be very satisfactorily answered. But we will give a further reason: The finer the grain is ground the greater surface is presented to the immediate action of the fluids of the digestive apparatus. Any soluble substance is more readily acted on when finely pulverized, than when in a solid mass. We have now given our authority for the statements made in our former article, and have answered, we think, satisfactorily, the question why it is necessary to mix "fine meal with cut and moistened hay." No doubt some portion of the corn when fed in the ear will pass into the first stomach for the same reason that other coarse food does. An error of our friend of the *Journal* has led us to detect an inadvertence in our account of the digestive organs of the ruminants. The office of the "second stomach," is not, as he states, to force the food back "into the gullet." but to hold the water necessary to macerate the food. "The liquid swallowed," says Dr. Carpenter, "seems to be specially directed into the second cavity, the *reticulum*. It is here that the peculiar provision of 'water cells' is found, for which the camel has long been so celebrated, but which exists in a greater or less degree in all ruminants. These cells are bounded by muscular fasciculi, by the contraction of one set of which their orifices may be closed and their contents retained; whilst by that of another set, the fluid they contain may be expelled into the general cavity of the stomach."

It is said that "necessity is the mother of invention." We happen to know that Mr. Straub run for a long time, a corn and cob crusher by the steam power used in his establishment, the meal was fed to cattle and horses, but it was ascertained that the irritation and disease to which we referred, became quite common among the animals fed upon it. He then run the crushed corn and cob through the burr mill, and reduced it to "fine meal;" but this required extra labor, to save which, Mr. Straub directed his inventive powers and produced the mill which does the work at *one operation;* and as our friend of the *Journal* desires light on this subject, we will briefly state that there are two heavy circular plates of steel, encased within an iron covering, around the spindle; one plate is stationary and the other revolves with the spindle; they are so adjusted that they act like a pair of shears and cut and break the cob into short pieces as the ears are passed into an opening like that of an ordinary corn sheller, these pieces fall directly between the stones and are ground fine.

In the May number of the Michigan Farmer for 1855, we learn that one of the editors of that paper, after feeding corn and cob meal for two months to his cattle and horses, discovered the irritating effects of the food upon one of his horses, and writes to Dr. Dadd, and alludes to the case as follows:

"For the purpose of testing by *actual trial*, the value of corn and cob meal, after removing upon our farm, we procured a supply at once. Commenced with a full feeding the first of January last, and continued two months, giving to horses and cattle. After a month's feeding, febrile symptoms were occasionally observed in one

of the horses, such as short and quick breathing, full pulse, inflamed feet, fatigue from light exertion and sweating at the breast. At the end of two months, nearly, these symptoms were greatly aggravated; the appetite failed, and the animal lost flesh. Though well satisfied as to the irritating cause, a note was dispatched, containing a short account of things, to our very obliging friend, Dr. Dadd, of Boston, and requesting his opinion on the feeding qualities of corn and cob meal."

In conclusion we will state that we have no pecuniary interest in the manufacture or sale of Mr. Straub's or any mill, but we deem it not only our province, but our duty, to recommend to the farmers the best machines and implements that are offered to the public, as well as to give the best modes of cultivation, &c. This we shall aim to do independently, candidly and honestly, and at the same time, when we deem it proper, expose humbuggery and fraud wherever it exists. We must therefore decline the challenge of our Indianapolis friend to take part in the contest "with a Felton against a Straub." If we have seen the Felton mill, it was but for a moment, and we know nothing of its construction or its merits. If its grinding surfaces are of metal, when new it may grind as fast as the burr or Straub mill, but we are quite sure it is not as durable, nor can it be as readily sharpened by an ordinary farm hand as the burr stones can. But we are for *improvement*, whether in a Straub or a Felton, and we shall be ever ready to chronicle it wherever it is found. IMPROVEMENT is our motto.

THE SOUTHERN PLANTER.

RICHMOND, JUNE, 1856.

TERMS.

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TO DELINQUENT SUBSCRIBERS.

There are subscribers to the Planter, who owe for some years and cannot be induced to pay.

There are some who owe for three years, and though applied to, they have neglected to pay. We feel that it is but justice to ourselves to notify such delinquents that if they do not settle by the first of July, we shall be compelled to strike their names from our lists. Though we shall continue to send their bills out periodically. We mean no offence to these delinquents, and beg that none may be taken. We doubt not there are many very excellent gentlemen in the list, and possibly some personal friends, whom we should, beyond all things, regret to displease.—We know that nearly all of them intend to pay, but the putting it off is a serious matter to us; and the rule we have determined to adopt, and hereby give notice of, is a financial measure—one intended to save our money—and not springing from any feeling of irritation against any one.

In adopting the foregoing rule it may happen that we may discontinue the paper of some of our subscribers who have made payment to agents, who have failed to make any return of their agency to us. Should this occur, we will promptly make the necessary amend when notified of the fact.

Sale of Dewn Cattle, South-Devon Sheep and Berkshire Hogs.

It will be seen by reference to our advertising columns, last page, that Lewis G. Morris, Esq., of Mount Fordham, New York, intends to dispose of his whole stock of the above animals at auction and without reserve. His stock are all excellent, and he is no jockey. Gentlemen who wish to purchase may be assured that his stock are, in point of pedigree, what he represents them to be, and in point of form and style what he thinks they ought to be. He has spared no expense in his importations and selections. At least that is our opinion from what we have heard of Mr. Morris. For catalogues containing description, &c., address Mr. Morris, as per advertisement.

THE GUANO CONVENTION.

If we do not agree with poor Edgar, that "the Prince of Darkness is a gentleman," we yet have very good authority for saying that he is not altogether so black as he is sometimes painted.

For somewhat the same reason, we suppose that Mr. Barreda, that dog with a bad name, ought not to be hung outright, nor even execrated as heartily as is the fashion just now with a good many very excellent gentlemen. His administration as agent of the Peruvian Government for the sale of the guano of which it holds the monopoly has been more and more censured as the price has risen, until at last a convention of Guano-using farmers is called for the purpose of memorializing Congress to lay a sliding duty on that article, which shall amount to prohibition, when its price shall exceed a certain maximum—we think forty six dollars per ton.

We shall not undertake, in objecting to the proposed action of this convention, to defend Mr. Barreda from all the charges that have been brought against him; nor to hold him up as a model in manners, ethics, or commercial transactions. We doubt not he is a bear; not remarkably scrupulous in his dealings; and with as little of the true spirit of commercial liberality as any other Spaniard. But we shall try and deal him some measure of justice by way of inducing our friends to look at their own interests through a somewhat clearer medium than their present prejudices afford.

Of one ground of complaint against this agent, his alleged breach of faith with Mr. Sands of the American Farmer, we think an erroneous view has been taken. The facts of that transaction are no doubt candidly and truly stated by Mr. Sands, to whom we would by no means impute impropriety. But the policy of such bargains, and the interest of farmers in resenting a non-compliance with them, are altogether different questions. If we understand the case, Mr. Sands agreed with Mr. Barreda to take from him a certain number of tons of Guano, which he in turn was to sell to *cash* customers at less than the ruling retail rates, and on terms which would allow him less than the usual merchants' profit. Now we know that the commission merchants who deal in this article advance money to its purchase and extend credit to its sale, no great number of farmers paying cash for it. But this arrangement of Mr. Sand's assumes, against the probabilities, as the facts present them, that the merchant's profit on this venture is exorbitant, and that he can stop it by an arrangement, whose effect, so far as it goes, is to deprive the merchant of his cash customers, and of course to raise the price on time payments; or drive him from the trade, and deprive the credit dealer of his guano. From this would result a double injury: first to the productiveness of our own country, and second, to the Peruvian government through Mr. Barreda; who, if he could make such a bargain with his eyes open, would thereby prove senseless to his own interests, and faithless to the government he professes to serve. It was an inva-

sion of the regular course of trade, and if permitted to continue, which it was impossible it should have done, would not have enured even to the benefit of Mr. Sands's purchasers, who would have been supplied by Barreda with the worst guano he had.

The complainants about the high price of guano seem to lose sight of some important facts. Granting that the article is monopolized, and that every advantage will be taken of that fact that can be, it does not follow that there will be no limit to exorbitancy. Except in the case of monopoly of articles of paramount necessity—as quicksilver for instance, which was monopolized by the Rothschilds until more recent discoveries of that mineral have liberated the trade—the monopolist has to consider what is the highest price, it will be safe to charge; since if he exceed that limit, as he easily may, either from mistake or greed, he fails to sell. Here then is a motive to reduction in price; and superadded to this there was in Barreda's case an uncertain tenure of office, which rendered it his interest to sell as largely as possible. That he has not *greatly* exceeded proper limits may be inferred from the fact that the sales were large even at sixty dollars per ton; larger, in fact, than they ought to have been, as some commercial men now say the price of wheat was last fall.

But the rise in price was certainly independent to some extent of the monopoly, and of the enhanced price of wheat. Until within little more than a year past guano has been brought into the United States mainly as a return cargo in bottoms trading to California. Going out freighted, but for the opportunity that guano afforded, many of them would have had to return empty or to make a still larger circuit to obtain a back load. Hence moderate freight charges. But since California has come to produce for herself most of the articles that in her infancy she took from the Atlantic, very few ships, comparatively, trade thither, and as a consequence most of those that go for guano now go out in ballast and charge much heavier freights. Besides this special reason, guano, like every other article, must feel the fluctuations in freights; and if from any cause there is a general advance in them, such as the carrying trade experienced in the late European war, it will cost more to transport it from Peru to the United States. To this effect, then, must be attributed a good deal of the rise in price. Another cause no doubt is the general depreciation of the precious metals, and the consequent rise in the level of prices. And a third may be a disposition to extort more from those who were thought able to pay more. But the facts in this latter attributed cause would seem to acquit Mr. Barreda of any unusual amount of extortion; for when wheat had risen from one to two dollars per bushel, guano in the same time had risen from forty five to, saysixty d ollars per ton, so that he, with the above causes to justify him as far as they may be allowed to go, has only advanced 33 per cent. in the face of an advance in wheat of 100 per cent., or in the ratio of one third only. In fact it is less than that; and strictly speaking guano is not so high now as it was several years ago.

Assuming, for the sake of illustration, that a ton of guano will make 70 bushels of wheat, in a good season, then at forty five dollars per ton, and one dollar for the wheat, the profit on the outlay is 55 per cent. But at sixty dollars per ton, and two dallors for the wheat, the profit is 133 per cent. It is true that sixty dollars is too high for guano on account of the fluctuations in the price of wheat, and the uncertainty of the crop, and the price must fall.

Whether the proposed guano convention can reduce it to the desired limit by imposing restrictions, any better than individuals can by consulting their own separate interests, is very questionable; and the policy of the effort therefore debateable. So also is the propriety of Virginia's going into that convention. The use of guano, as is well known, is most profitable on the least fertile lands, the benefits diminishing in proportion to fertility. Of such infertile lands, Virginia has a larger share than any other state likely to be represented in that convention. In many sections of this State guano is the main reliance for the wheat crop; in other more circumscribed districts, and in other states, as also in Great Britain, it is used only as an adjunct to other manures, or as a means of giving the wheat a good start. The relative necessities of the sections then, are very different; and the sacrifices to be exacted are by no means equal. The region which increases to crop by four or five bushels per acre, and ensures a stand of grass perhaps in addition, cannot pay as much for guano as the region which could make little or no wheat without it, nor will it lose as much by a failure to obtain a supply. Supposing that prohibition may be the effect of the requested

legislation, one section will thus have given up much more than the other.

But it is not intended that prohibition shall be the consequence of the law, and we very much doubt if the convention would have half a dozen members in attendance if it were thought that would be the effect. But it *may* have that effect, and hoist the engineers with their own petard.

The game of restriction is always hazardous, and should never he played by gentlemen in a passion. Bluff itself is not more dangerous. Suppose Congress shall unwisely throw this tub to the whale, and grant the law. Where may we stand? British farmers use a great deal of guano, perhaps as much as we do; and they pay for it, grudgingly, to be sure, but still they pay it, more than we pay. If the effect of the prohibitory duty shall be to reduce the price of guano to $47 per ton, to the British wheat grower when we cannot buy at less than $46, or if Peru, in exasperation, places Great Britain on the footing of the most favored nation, and sells guano to her at $40 per ton, but none to us at any price, can we doubt that the whole of her annual sales will be made to tfie English wheat grower? And how great would be the impetus thus given to our greatest competitors, who in buying all that we now get would kill two birds with one stone: increase their own product, and cripple ours. But suppose we shall bring Peru to terms. The same of course will be granted to all other nations, and thus we shall stand precisely where we were before if the price of wheat abroad depends on the relative production of the wheat zone.

But again: As Peru stands by treaty stipulation on the footing of the most favoured nation, we shall be obliged to impose the same restrictions on the guanoes of all other countries except our own, if we have them, and so strengthen their competition against ourselves all over the world.

And still again: Supposing that none of the above objections apply, as Peruvian guano is the best in the world and outsells any other, it can be taken from Peru to other countries and change hands without let or hindrance; thence it can be shipped hither, and will be, with all the charges of this roundabout transaction superadded to the price.

So that turn which way he may, the position of the restrictionist bristles with dilemmas.

We hear it contended that public opinion is in favour of the Convention and its measure. Perhaps so; and if inconsiderate declarations be accepted, of course so. But by their *acts* ye shall know them. Persons very frequently, and very honestly too, commit themselves to one opinion where their conduct really exhibits another; for what *but* opinion steers the course of men in the daily business of life. And what is public opinion but an aggregate of private opinion. Now last fall, every body who could not get guano at less, bought it at $60 per ton, if they thought they could afford it, and the large number who bought at that price shews that they then thought they could. Their aggregate, or public opinion was then, that though guano might be high, it was not too high, at that price. If they shall have been mistaken, as if wheat brings less than two dollars they certainly will have been, they will not buy again; and as the Peruvian Government must meet its liabilities by sales of Guano, the price will fall. If it does, the fall will have resulted from "public opinion privately expressed," so to speak; which springing from the great truth that in the ordinary transactions of life each man is a better judge for himself than Government can be for him, will be much more influential on trade, and more salutary to all parties, than a memorial to Congress, asking that body to say, in effect, by law that no man can afford to give more than 46 dollars per ton for guano, when the fact is directly the reverse.

We have heard it gravely contended that that *is* as much as could be afforded for the article. Why then do people buy it at higher rates? Are all the farmers demented? And how can a convention of mad men cure the Lunacy? What people think they can "afford" to give is the measure of price whether under the influence of competition or monopoly: and for a convention of farmers to attempt to regulate the price of any article monopolized or not on any other principle than that of individual opinion, will be about as hopeful an effort as for a man to regulate his own breathing, which whoso attempts will find himself short-winded in some ten minutes or less.

The talk that we have heard about the necessity of combining against monopoly, and claiming this legislative concession to a great interest is like that we hear too often about the necessity of having agriculture represented in the cabinet at Washington, and setting up a department for the

special benefit of the farming class. We have already extended this article too far, and must pass by a branch of the subject which has too little force to make it worthy of refutation. We may at some other time, and in some other connection, attempt to shew that this policy of class legislation finds its best development and ripest fruit among the barbarous people of India; and that wherever else it has had even a partial existence and recognition it has been the teeming mother of factions and discords.

How desirable it may be to get Peruvian guano at lower rates, and in greater quantity than we now have it, is a complex question, and cannot yet be stated with confidence. On the whole we incline to the affirmative side of it. But the plan which we should advise to accomplish the object would be very different from angry remonstrance or petulant petition. It would be one whereby the above question would be solved by the experience of those most interested. We would ask the Government to send an able man, as minister or commissioner to Peru to make a commercial treaty with that country. As we get coffee from Rio in return for the flour we send her, so we could send to Peru the very product her guano makes. The country is barren, and means of subsistence are imported from Chili. Equally destitute is it of manufactures; and these we could supply in profusion. Here lies the foundation of a new trade, which would grow as the wants of the people expanded, and impel the government to terms of liberality. Once let the people see that their subsistence and development depended on those three little islands at Pisco, and that by the time they were exhausted, if ever that time shall be, they will have strengthened themselves again for the wrestle with Potosi, and there be no fear of a failure to get guano on fair terms.

The true policy of Peru is to sell guano until she is rich enough to resume her natural business of mining. And it should be our work, our contribution towards her recovery, to convince her of that fact; to give her government some great object for the employment of intellect which is now frittered away in intrigues, and of energies which are now wssted in Revolutions. This is an enterprize worthy of farmers, broad, generous, national, philanthropic, and far more glorious than railing at a foreign government. If we thought the convention would give that turn to its deliberations we should hail its meeting with pleasure.

USE OF KELP AS MANURE.

The Boston Cultivator contains a very interesting account of the farm of Mr. Ephraim *Brown* of Marblehead, Massachusetts, the great fertility of which is chiefly referable to the use of Kelp. The farm contains 240 acres with over a mile of sea beach. The sales of 1854 amount to $7000; the sales of 1855 are expected to reach $10,000, at an outlay in production of $3000. The leading crop is onions. But there are only about 8 acres in this vegetable, averaging about 625 bushels, and running up as high as at the rate of 1000 bushels. The manure chiefly decomposed kelp at the rate of 8–10, 12 cords per acre with a small quantity of compost manure. Five acres are in squashes, one measured acre of which produced ten tons. Besides these crops are cranberries, hay, potatoes, and some minor productions, 35 acres only are under hoe and plough. Labour ten to twelve men in summer, fewer in winter, boarded on the farm, and paid at the rate of $90 to $130 per. annum.

Have none of our sea-shore farmers availed themselves of sea weed? We should be pleased to hear from some of our subscribers in Accomac and North Hampton on this matter.

THE NEW ESCULENT ROOT.

THE CHINESE OR JAPAN POTATOES.

Sometime ago one of our friends sent us a long article in praise of the above root, which was published in the New York Tribune by Wm. R. Prince of Flushing, Long Island.

Before publishing it, we applied to our friend Dr. D. S. Green, of Culpeper, now stationed at Portsmouth, who was surgeon in the Japan expedition, to know the value of the thing. He is an enthusiastic farmer, and we were sure would not let anything of Agricultural value escape him. It is unnecessary to publish his letter in reply: its substance was condemnatory of the value of the root to the extent stated by Mr. Prince. He thought it *might* prove valuable as a root for stock, but if it supplanted the Irish Potato, it would do more here than it had done in China, where he had seen two measures of it offered to purchasers in lieu of one of potatoes, and refused.

Other and independent testimony of competent

judges who have known the root in China satisfy us that it is of but little value, and does not promise to prove profitable to any body but Mr. Prince, who is a well known nurseryman and speculator in "garden truck."

PRINCESS ALICE MAUD STRAWBERRIES.

Mr. James Guest, Hollywood Nursery, has sent us a specimen of these mammoth strawberries. They are the largest and finest variety now in cultivation, and are remarkably fine for the season.

Mr. G. will have plants of this variety for sale in the fall, and his advertisement will be found in our columns at the proper season.

GUANO ATTACHMENT TO THE WHEAT DRILL.

We publish below an extract in regard to the disputed claim of Mr. T. F. Nelson of Clarke as the inventor of what is known as the guano attachment. So far as our belief goes we freely give the benefit of it to Mr. Nelson. We know him well and respect him highly; he is an honourable gentleman, and for him to assert a positive claim to anything is *prima facie* evidence with us that he is right. In this particular matter of the guano attachment we are perfectly certain that he is the inventor of it. Not only are we assured of it by himself, but gentlemen from his neighbourhood cognizant of all the facts, and worthy of utmost credit assure, us that there is no doubt of the genuineness of his claim.

As there are conflicting claims to the honor of *inventing* and introducing into Virginia, this valuable addition to the catalogue of Agricultural machinery, we render but an act of simple justice to a citizen of Virginia, by setting before the Virginia public, the following extract from the report of a committee of the Virginia State Agricultural Society, ascribing to him the honor of having originated this important and valuable implement.

The State Agricultural Society in its schedule of premiums for 1855, proposed to award "*honorary testimonials*, to each individual of Virginia, who, previous to 1854, has discovered, or introduced, or brought into use any principle, process or facility, or generally any improvement, by which important value has been gained for the agricultural interests of Virginia."

The chairman of the committee of award under the *8th branch* of the society's schedule, N. Francis Cabell, Esq., of Nelson county, Va., reported, 1st: That the Rev. Jessee S. Armistead, of Cumberland, is entitled to such honorary distinction for having "originally prepared" a "specific manure for tobacco, &c," an account of which is detailed in the report and will appear in the transactions of the society. Reference is also made to a further account of it in the Southern Planter for April and June, 1853. The report then proceeds to award a similar distinction to Mr. Thomas F. Nelson, of Clarke, for his guano attachment, as the following extract will show:

"2. On the first introduction of guano, and for some time afterwards, it was the general impression that this manure was so highly stimulating in its properties, as to destroy the germ of any seed-grain with which it might come in contact, when both were deposited in the earth. Mr. Thomas F. Nelson, a citizen of Clarke county, by experiment, so early as 1849—and which was continued in subsequent years—satisfied himself that this was a vulgar error. As guano was also highly volatile, a further deduction was, that in the usual mode of its application there was a great loss of useful effect, much of it escaping without having contributed any thing to the growth of the plant; and that a less amount than was commonly used could be made to answer the end if placed in immediate proximity to the seed. With this view, he set about devising an implement which should effect this purpose. He invented what he calls a guano attachment, which in conjunction with any one of several drills that are now used for seeding wheat, may be made to deposit both guano and seed in regulated quantities and at the required depth—being the same which he has heretofore exhibited on the Fair Ground of this society. Whatever claims others may have to the invention of a similar implement, the undersigned has had evidence laid before him abundantly sufficient to convince him, that Mr. Nelson was the first in that region, and perhaps in the whole State, to prove and expound the principle above mentioned, and that he was the independent inventor of an implement, such as we have described; and that its employment for the purpose suggested, has resulted in the more economical use of that costly article and with equal effect."

GARDENING FOR THE SOUTH.

We have received the above book, by Saxton. New York, from Mr. Woodhouse, Bookseller, Richmond.

It treats of the kitchen and fruit garden, with hints on landscape and flower gardening.

Not having time to read this book, we submitted it to a lady friend of ours, who is one of the best judges of such things that we know. She says it is the best Gardening Book for our region she ever saw. And we feel no hesitation in endorsing her opinion, and recommending the work to every one who has a garden.

Price, $1 25.

MR. WILLIAM G. CRENSHAW'S LAND FOR SALE.

We rarely "call attention" to advertisements, and never without a very good reason. We are impelled to do so in the case of Mr. Crenshaw's advertisement, because his farm presents a case in point to the argument and exhortations we have so frequently employed in favour of fine wooled sheep. As he is going out of the business, we have applied to him for his experience and now give it, premising that he is a merchant and speaks from his books.

He began with 325 sheep in October, 1851, in February, 1852, he purchased in New York, 120 more. He has ever since been steadily increasing his flock by retaining all his lambs, and has not sold off any of his old ewes. Last summer at shearing time his whole number reached about 1000 head. A good many of his lambs died during the fall, and the past winter, which was an extraordinary one, killed a considerable number. After selling off one hundred and fifty this spring, many of them mutton, at $5,00, his flock containes about 800 head.

His actual sales to this time amount to,	$4 500
His clip this spring will certainly reach,	1 500
Gross sales,	6 000
Deduct cost of purchases and expenses from New York,	1 700
Nett	$4 300
Add estimated value of 900 sheep at average cost of his purchases, $4,	3 600
Nett profits,	$7 900

Every thing fed to them has been raised at home. This shews an average profit of $2 000 per annum from an average number of 600 head of sheep, including old sheep yielding but little wool, and allowing for variation in value of wool, and depressed prices at one time. With 600 picked sheep, it is not unreasonable to say that the profit can be pushed up to $4 per head. This certainly compares well with the profits of wheat for an average of five years. But Mr. Crenshaw also raises wheat, and now has seeded a large crop, which we are told is very fine.

We think a statement of this sort, based on actual sales for four years, shews that wool growing is profitable in Virginia. Several of our friends who have seen the farm, (we never have,) say it has improved very rapidly, and it is now beautifully grassed.

Those who think wool growing will not pay, may here see that it will; those who have been discouraged by failures, may go and see where the fault was.

We wish all could see it, for sooner or later the farmers of Middle Virginia must go into fine wool. It may not be for a generation, but sooner or later it must be. Guano can never take the place of animal manures.

Why sell so fine a farm? Because the owner is a merchant, residing in Richmond, and up to his chin in business!

THE WHEAT CROP.

From what we learn, the wheat crop in Virginia is not as good as the crop of last year.—We have seen or heard from a great many farms in various parts of the State, and whilst in particular localities, as Orange and Albemarle for example, the crop is better than they have had for several years, and whilst in particular neighbourhoods there are prospects of good returns, yet on the whole, the fly, the joint worm, and chinch bug, one or more, and the hard winter, have made sad havoc with the wheat. The drought, too, which at this time prevails in some considerable districts, makes the prospect critical. But we should not forget that all the wheat last year was made after the first of June. Nor should we forget in our speculations that nothing is more uncertain than the yield of wheat, except the price of it.

HARVEST DRINK, DIET AND MEDICINE.

We cannot do better at this approaching season of hard work, than republish the following, with slight additions, which we first published in the Planter for June, 1854.

"Mr. Blair Burwell, of Powhatan, called at our office this morning, and gave us the following recipe for a harvest drink:

Water,	33 gallons
Sharp Vinegar,	1 "
Molasses,	1¼ "
Ground Ginger,	¼ lb.

"This will last thirty hands until dinner time, when as much more may be mixed up to serve until night. It is carried to the field daily in a cart and moved about after the hands, each one of whom is limited to a cocoa-nut full at a time, always without ice—(they drink nothing else).

He says that the Yankees fought on this mixture at Bunker's Hill, and he agrees if it kills a man to be indicted for murder.

"For our part we see no harm in ice. We have used it regularly for fourteen years without any bad result, but on the contrary, we think, with benefit."

We know persons who have used it beneficially for a still longer period. A venerable friend of ours, recently deceased, assured us that he had used it for thirty years or more, and never without advantage. His plan was to carry out a barrel of ice in a cart, and keep the water tubs nearly filled with it. His theory, and we believe the true one, was that the ice acted as a tonic; and the hands could never overload their stomachs with it, because the water was kept so cold that they could never drink to distension.

Strong coffee should always be given at breakfast and at night.

No form of spirituous liquors should ever be used; and we who say it are not a "temperance man."

"Well cooked black-eye peas, fried onions and rice, the latter cooked in puddings, or in as many forms as you please, are the best vegetables."

Raw onions are also said to be an excellent food with those they agree with, and a friend recently mentioned to us a case of a negro who had never been able to stand the heat and fatigue of harvest, until he thought of supplying him liberally with raw onions, upon which he went through his work like a well trained four miler.

"Salted meats and fish, never fresh, and a plenty of red pepper, in every thing that it suits, boiled in the pod.

"For physic, the pills recommended two years ago by our friend Charles B. Williams, as follows:

Pulverised Opium,	18 grains	made into 24 pills
" Red Pepper,	18 "	
Gum Camphor,	12 "	

To be taken when the first symptoms of cramp or diarrhœa appear—one then, and an additional one afterwards if necessary, according to the exigency of the case."

We have proved the efficacy of this repeatedly, and would as soon think of going into the harvest without a basket of tools.

☞ See advertisement of "Board in the Country wanted."

HAY COVERS.

We insert the following, which we solicited in lieu of an Editorial which we had intended to write to the same effect.

NORTHAMPTON, APRIL 25, 1856.

Dear Sir:—

I was much pleased to receive your note of the 21st instant enquiring about the hay covers and I now enclose two receipts which I wrote for our village papers.

The receipt for hay covers is intended for the million—to bring the cost within the means of the poorest farmers; but, for those who are able to pay a small additional price, I should advise them to use cloth that is a little wider and to cut the covers about 45 inches long. I consider 40 by 45 inches as the most desirable size.

I should suppose a small farmer would require about 50, and extensive farmers from 100 to 200, without regard to the number of acres.

My men think that they can make hay two hours sooner with the use of hay caps than without them, even if there should be no rain—they protect the hay against heavy dews.

The size of a hay cock is in this region, on the first day of raking up, when the hay is nearly green, about 5½ to 3 feet in height and about the same in diameter at the bottom—on the second day nearly double the size.

It is now questionable whether any composition is necessary, as the hay cover is not intended to hold water, *but to turn it.*

We know that a cotton umbrella is a very useful protection against rain, and such farmers as do not like the trouble of painting the cloth over, might supply themselves with a *good* brown cotton sheeting and merely sew stones into the corners, which would cost only about 8 cents each.

When it was stated that the county of Worcester in this State would have saved $20,000 last year if the farmers had been supplied with the hay covers, it was not understood to what extent their hay crop was—they would have saved, I think, $150,000, as in very many instances their hay was sold at half price and was only fit for bedding for their stock.

Respectfully yours,

EDWARD CLARKE.

Northampton, Mass., Apl.. 25.

HAY COVERS.—*Every Farmer his own Manufacturer.* Take a piece or more of yard wide unbleached cotton sheeting that can be bought for 7 or 8 cents per yard and tack it up on the sunny side of the barn or board fence. Then prepare the following mixture, namely:—For one gallon of linseed oil add about two pounds of beeswax, to be simmered together and when taken from the fire add about a quart of Japan. When it is cold, it should be about the thickness of paint. If too thin add more wax, and if too thick add more oil,—then paint the cloth over, on one side only, with a common paint brush, and after drying a day or two take it down and

cut it into squares, then pick up stones of about 6 or 8 ounces each and get the females of the family to sew one into each corner and the thing is completed. It would be an improvement to enclose the stones in a small bag and suspend them a few inches, which would be thought very little more trouble in so good a cause. No hemming the selvages is necessary. Cast-iron weights of 6 ounces each would cost about one cent apiece, but it is doubtful whether they would answer a better purpose than stones. Every farmer should supply himself with these covers at once, as by and by, he will be too busy to attend to this matter. The immense losses sustained last year, by wet weather, should admonish him of its utmost importance. There is the best authority for stating thatthe county of Worcester alone, which produces upwards of 145,000 tons of hay annually, would have saved 20,000 dollars last year if the farmers had been supplied with these hay covers.

Hampshire Gazette.

HALF-BRED SOUTH DOWNS.

We have a few half-bred South-Down Buck Lambs for sale at $12.50 each, delivered in Richmond. We advise all persons to buy thorough bred stock in preference to half breeds; and *we* would rather pay four times the difference.

But many persons will not do it, or think they cannot afford it. To all such we offer the above lambs, which will be delivered in Richmond, at the basin, wharf, or any of the depots.

WHAT PENNSYLVANIA FARMERS PAY ANNUALLY FOR THEIR HORSES.

Messrs. Editors:—I note with much satisfaction that some of your correspondents have commenced a discussion in regard to the availability of steam for agricultural purposes; and trust it will be continued, as good only can result from its agitation. Of its availability for all the in-door operations of the farm, such as grinding and shelling corn, cutting fodder, sawing timber, threshing, &c., we have abundant evidence of the most convincing character; and it is only a few months since the agricultural world was startled by the announcement that Mr. Obed Hussey, of Baltimore, (the inventor of the first successful reaping machine,) had made an effectual application of it to plowing. How the cost of Mr. H's experiment compares with the same amount of labor performed by horses or oxen, we have not been informed, but the mere fact of such an experiment having been made, and having succeeded, at once demands an investigation on this important point—an investigation which it is to be hoped some of your correspondents or yourselves will proceed to make. In the meantime allow me to present some hasty estimates of the amount which Pennsylvania pays annually for the support of her horse flesh.

From some recently published statistics, I learn that there are in Pennsylvania 352,657 horses and mules. Of this number, perhaps 52,658 are employed in cities and towns for other than agricultural purposes, leaving 300,000 for the use of the farmer. At the present price of horse provender, the average daily cost of feeding a working horse would be fully 33⅓ cents. Assuming this to be correct, the daily expenditure for horse feed in Pennsylvania is $100,000, or $36,500,000 per annum.

The average lifetime of the horse is about *nine* years, and the average cost of his keeping for that time $1094,94. Shoeing, medical attendance, grooming, &c., not included.

The average first cost of the 300,000 horses used in Pennsylvania for agricultural purposes is not less than $50 each, making an aggregate of $15,000,000, dividing which by nine, (the average term of horse life,) and we have $1,666,666⅔, principal and interest, as the annual outlay for horse flesh in our State, the whole of which is to be charged to the expense account of our agricultural operations. Let us now recapitulate:

Cost of feeding 300,000 horses one year,	$36,500,000
Average annual purchases,	1,666,666
Average annual cost of shoeing, grooming, medicine, &c., $20 each,	6,000,000
Making an aggregate of	$44,166,666

as the sum total of the amount which the people of this Commonwealth pay annually for horse flesh alone. At even the present high rates of produce, it is equal to more than the entire value of the wheat and oats of the State.

From the above statements we find that more than 33,000 horses die annually, the average weight of which may be set down at 500 pounds each, or 26,400,000 pounds of flesh, bones, &c., abounding in nitrogen, the phosphates, &c. It is asserted upon authority, that the body of a dead horse, cut to pieces, and mixed with ten loads of muck, becomes, in a single season, compost of the most valuable character. If this be correct, and I believe it is, we ought to have from the carcases of the 33,000 dead horses, 330,000 loads of compost, or sufficient to manure 30,000 acres annually.

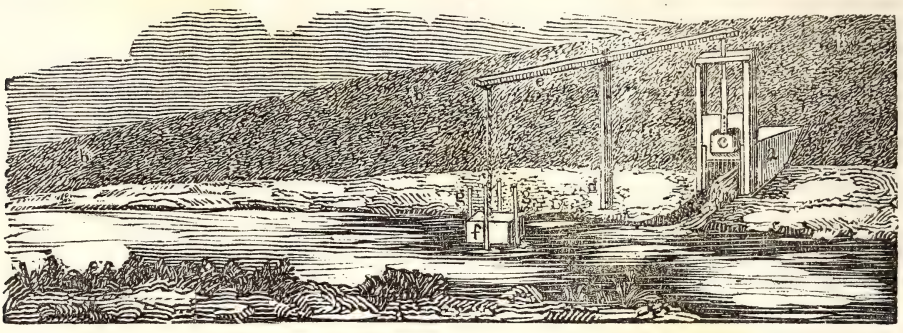
Now, if the carcases of all the horses that die were taken care of as above suggested, what a vast addition to the fertilizing material of the State would they afford. Enough manure would be produced by them to add 600,000 bushels to the wheat yield of the State—an item certainly worth looking at. But it is more than probable, that not one carcase out of a hundred is ever cut up and mixed with muck, or even buried. Generally, they are dragged to some out of the way place to furnish a banquet for the corn-thieving crows, are more than worthless dogs.

These estimates are not presented as being accurately correct, but they are sufficiently so to render the enquiry whether steam or horse power is most economical, peculiarly interesting.—*From the Farm Journal.*

Commnication to the Virginia State Agricultural Society.

TIDEGATE.

[The following is the description of a Tidegate, submitted to the committee of awards on that subject, at the Society's third annual exhibition, on which was awarded the premium of twenty dollars.]



DESCRIPTION OF TIDEGATE.

In the drawing, (b. b. b. b.) represents the embankment, which excludes the tide or other back-water. (a.) is the trunk, projecting several feet on the outside of the embankment, and closed by a sliding gate. (c.) is a box attached to the gate, designed to be filled with rocks, so as to regulate its weight and make it sink more readily into the water. (e.) is a horizontal beam, freely vibrating upon the top of the post (d.) by the pivot (h.), and is connected at one extremity, to the shaft of the gate, and at the other extremity, to a float (f.) of light wood. The weight of the float should be considerably greater than that of the gate, so as to overbalance the gate, and make it ascend as the float descends. The float is kept in its place by smoothe stakes (g. g. g.) driven into the ground around it, with sufficient play so as to allow it to move up and down readily when moved by the tides or back water.

The " modus operandi" of the apparatus will be seen at a glance. The float being suspended at the lowest convenient point, and immediately at the edge of the stream, will rise with the tide or freshet, and the gate, thus gradually losing its counterpoise will begin to descend by reason of its own weight, and the weight of the box of stones attached to it. The improvement in this tidegate consists in a long smooth shaft attached to the gate, and a horizontal cross bar, just above the gate, through which bar the shaft works, thus giving steadiness to the gate and causing it to descend with precision. In the original, exhibited last year, the gate would lean to one side or the other and its lower corners would thus wedge against the sides of the trunk, thus interrupting its free descent. But the improvement entirely obviates this defect, for the cross bar and shaft will always keep the gate perpendicular, and necessarily make its motion smooth and regular.

The recommendations of this tidegate, are its cheapness, its simplicity of construction, its long lasting, and the ease with which it is kept in repair. There is only one moveable joint (h.) and this is above the reach of the salt water which would soon render useless all working joints with which it came into contact. This improved gate is believed to be much superior to the original, and to be fully adapted to all the purposes for which it was designed, and in this belief, is most respectfully submitted to the committee of award by their humble servant, the designer, JAMES T. REDD.

Henrico County, October 25, 1855.

HOLLOW HORN.

Messrs. Editors.—The good example set me by J. W. M., in the Planter of this month, prompts me to write an article on the disease, *here* called "*Hollow-horn,*" which, in my opinion, is much more appropriate than "*Horn-ail;*" for, it at once declares the condition of the horn, and *all* will understand what is meant when it is mentioned. It is not generally considered a disease in itself? but the *result of a disease.* Let that be as it may, animals often die for the want of attention to—and skill in the treatment of the horn *directly.*

From experience in several cases among my own stock, and particular enquiry made of my neighbors who have had experience in the matter also, I do not hesitate in endorsing J. W. M.'s theory; but must plead for the animal—to save the horns if possible, for several reasons, such, as the excruciating pain it inflicts, if a portion of the bone, or pith, of the horn remains; which, is hard to determine by having only a gimlet hole through which to examine. I have had them thrown into convulsions by sawing off horns which were partially hollow; and, as they are often poor and weak, they cannot well endure the pain, nor spare the great amount of blood that will escape after such an operation; also, the deformity; together with an open horn to receive rains, snows, and frosts the remainder of its life, are sufficient, I think, to save the horn if possible. Therefore, I recommend boreing first with an ordinary shingle gimlet into the lower side of the horn about two or three inches from the head; and if it is found (by using a crooked wire) that the horn is hollow, *empty*, and dry, let there be a table spoonful or more of finely ground black pepper, and as much fine salt blown into it through a quill. But, if the horn contains matter that cannot escape through so small a hole, enlarge it, even to three fourths of an inch in diameter, so the clots can escape, after the horn is emptied of all loose matter, blow in the pepper and salt.

If after this treatment the animal does not very speedily improve, remove one horn; and, if that fails, remove the other in a day or two, or sooner if absolutely necessary.

If the blood flows very freely after sawing off the horn apply dry horse manure, (first filling up with pepper and salt) which keep to the place by the application of several thicknesses of cotton cloth well tarred.

The horn may be warm, and yet diseased; but, if the horn be *cold*, and upon tapping it with a hard substance, it sounds hollow, be assured that boreing is necessary.

I have always found accompanying the *hollow-horn*, a soft place in the tail some six inches or a foot from the lower end, *a perfect decaying of the bone*—it is called here "the wolf in the tail," it should be attended to at the same time with the horn.

It is treated in different ways; one, by cutting off the tail above the diseased portion and filling it with pepper and salt and bandaging it—the disease can be detected by squeazing the tail between the finger and thumb.

These diseases are not confined to any condition; *fat cattle* suffer from them as well as poor.

Before I close I would suggest that it is very important to raise all cattle that cannot get up themselves, as soon as possible; because, the longer they lay, the more discouraged they become, and will lose the use of their limbs. The best *simple* contrivance that I am acquainted with for the purpose is to procure a piece of strong linnen as wide as from the fore legs to the hind ones—(the length of the belly,) and twice as long as from midway on one side, to midway on the other side, measuring underneath: then, sew the ends together (as a hoop), and place it under the animal, it will be double; through each end pass a pole from twelve to fifteen feet in length; immediately in front of, and about three feet from the animal plant a strong stake about four feet high, and then raise the ends of the poles and secure them to the stake, as high, as midway the sides of the animal when standing; then plant a similar stake at the hind end of each pole; then, raise one pole at a time; or, both together, as the force may be; and secure each pole to its own stake as a proper height to elevate the invalid so it can stand. It is well to apply a leather strap around the breast from pole to pole; and, one also behind, from pitching forward or backward.

While it is all important not to let it lay too long, it is also necessary to let it down occasionally to relieve its limbs, &c.

J. M. B.

A HERD OF HEAVY CATTLE.

For a year or two past there has been a spirited competition between some of the great stock farmers of Illinois. The object being to produce the heaviest herd of cattle of 100 head.

In the spring of 1855, B. F. Harris, of Champaign County, sold one hundred head of cattle, the average weight of which was 1,865 pounds.

Determined to improve on these weights, but in the generous an manly spirit of competition which is always productive of great results, Mr. Rufus Calef and Henry Jacoby, both neighbors of Mr. Harris, and large and opulent stock farms, joined forces, and shipped in the spring of 1855, one hundred fat cattle, the average weight of which was 2,090 pounds, thus leading Harris 125 pounds to the bullock.

This put Harris on his mettle, and about the middle of last March, Dr. Johns, the President of the Illinois State Agricultural Society, was called upon to attend the weighing of another herd of 100 head, belonging to Mr. Harris. The aggregate weight of the herd was 118 3-5 tons, or 2,372 pounds each! Twenty-five of the best and fattest averaged 2,662 pounds each. "The Baby" of the twenty-five kicked the beam at 2876 pounds. They were so fat that three days were required to drive them to the station, 14 miles distant.

The average of the 100 is less than five years. Not one has ever been housed a day in his life; a half dozen pairs only have been yoked, and a less number worked. They have been pastured and herded on the prairies in the summer, and in the winter fed on corn in the shock and sound timothy, and yarded along the skirts of the Sangamon timber.

It is said that Mr. Harris is likely to ralize from $18,000 to $20,000 for the lot.

[*For the Southern Planter.*]

NUMBER OF MEMBERS OF THE STATE AGRICULTURAL SOCIETY IN THE SEVERAL COUNTIES AND TOWNS IN VIRGINIA.

The Secretary has completed from the records of his office a transcript of the names of the Life and Annual members of the Virginia State Agricultural Society for each of the counties and towns in the State. These lists are necessarily imperfect, not only on account of omissions, but of the changes which are constantly occurring by reason of deaths, removals and withdrawals. But they are to be submitted to Commissioners appointed to superintend elections to the Farmers Assembly in order to obtain and have reported by the 1st of July such corrections and additions thereto as will be at least an approximation to general accuracy and serve the purpose of a practical and equal adjustment of representation according to the scale of apportionment contained in the amended constitution. Counties or towns having fifty members, will separately constitute an electoral district and be entitled to elect one delegate—those having one hundred and fifty;—two delegates;—and an additional one for every additional hundred members listed. Other counties and towns having less than fifty members will be united as compactly as may be, so as to form other electoral districts out of two, or as many more as may be necessary to furnish collectively an aggregate of at least fifty members, to entitle such district to elect one representative. Many counties and several towns falling below the number necessary to constitute a separate district, may yet desire to augment their membership to the number required to ensure that privilege, and others having numbers sufficient for the election of one, two or more representatives with a large fractional excess, may desire to obtain the complement of another hundred, by the addition of new members, thereby entitling themselves to an additional representative. To enable all who desire to make such efforts, to do it with a correct knowledge of their numerical standing, the following abstract of numbers from the general lists, is subjoined, showing *first*, such counties and towns as constitute separately an electoral district and also the number of delegates to which each is entitled, and *secondly*, the counties and towns which fall below the number of resident members, necessary to constitute an independent district. It will be seen by reference to this abstract that a little effort only on the part of commissioners or other zealous friends of the society, will be required to secure the complement of numbers necessary to erect many counties into separate districts which must otherwise form but an integral part of one composed of two or more counties or towns. It will be also observed that other counties and towns having one or more representatives, with a large fraction still unrepre-

sented, may by corresponding exertion increase their membership so as to gain an additional representative. *But let it be distinctly understood and remembered that these changes must be reported to the Secretary by or before the first day in July next,* because at that time he is required to *conclude* the arrangement of districts with reference to then existing numbers and no new members enlisted thereafter can change the basis of representation for the present year, although all such, who up to the close of the elections, shall join the Society, will have equal right with older members to vote for as many representatives to the Farmers Assembly as may be assigned to his district in the apportionment to be then fixed and determined.

Abstract of members taken from the lists of members of the Virginia State Agricultural Society.

Counties and Towns.	Members.	Representatives.
Albemarle	495	5
Alexandria (county and town)	107	1
Amelia	212	2
Augusta	505	5
Bedford	117	1
Botetourt	65	1
Brunswick	100	1
Buckingham	132	1
Campbell, (exclusive of Lynchburg)	77	1
Caroline	150	2
Charles City	55	1
Charlotte	315	3
Clarke	51	1
Chesterfield	292	3
Culpeper	85	1
Cumberland	149	1
Dinwiddie, (exclusive of Petersburg)	66	1
Fauquier	87	1
Frederick	64	1
Fluvanna	84	1
Greene	77	1
Goochland	91	1
Halifax	236	2
Hanover	246	2
Henrico, (exclusive of Richmond city)	466	5
Jefferson	67	1
King William	79	1
King and Queen	75	1
Lynchburg	144	1
Louisa	297	3
Lunenberg	189	2
Madison	104	1
Mecklenberg	146	1
Montgomery	64	1
New-Kent	50	1
Nottoway	190	2
Norfolk city	79	1
Orange	146	1
Petersburg	374	4
Pittsylvania	118	1
Prince Edward	273	3
Prince George	78	1
Powhatan	167	2
Richmond City	1569	16
Roanoke	78	1
Rockbridge	139	1
Rockingham	106	1
Spottsylvania, (including Fredericksburg)	102	1
Wythe	69	1

Counties in which the members under 50 in number, and as yet too few to make separate electoral districts:

Counties.	*Members.*	*Counties.*	*Members.*
Accomac	3	Monroe	10
Alleghany	3	Morgan	2
Amherst	44	Nansemond	3
Appomattox	31	Nelson	45
Barbour	1	Norfolk County, (exclusive of city and including Portsmouth)	4
Bath	19	Nicholas	0
Berkeley	2	Northampton	13
Boone	0	Northumberland	2
Braxton	0	Ohio, (including Wheeling)	3
Brooke	0	Page	15
Cabell	1	Patrick	4
Craig	6	Pendleton	0
Carroll	5	Pleasants	0
Doddridge	0	Pocahontas	0
Elizabeth City	19	Preston	0
Essex	45	Princess Anne	16
Fairfax	28	Prince William	14
Fayette	0	Pulaski	19
Floyd	6	Putnam	1
Franklin	22	Raleigh	1
Giles	12	Randolph	0
Gilmer	0	Rappahannock	14
Gloucester	33	Richmond County	3
Grayson	3	Ritchie	0
Greenbrier	18	Russell	0
Greensville	26	Scott	0
Hampshire	4	Shenandoah	25
Hancock	0	Smyth	9
Hardy	1	Southampton	10
Harrison	1	Surry	21
Henry	18	Sussex	9
Highland	18	Stafford	21
Isle of Wight	7	Taylor	1
Jackson	7	Tazewell	4
James City	17	Tyler	0
Kanawha	7	Upshur	0
King George	14	Warwick	1
Lancaster	6	Warren	9
Lee	0	Wayne	0
Lewis	0	Wetzel	0
Logan	0	Washington	19
Loudoun	44	Wood	1
Marion	0	Wyoming	0
Marshall	0	Westmoreland	35
Mason	5	Wirt	0
Mathews	4	Williamsburg	9
Middlesex	6	York	6
Mercer	5		
Monongalia	1		

Life members.....1,465
Non-resident members.....224
Total members of society.....10,103

CHEAP OIL FOR KITCHEN LAMPS.

We find the following, says the *New England Farmer*, in an old almanac, and think that if it will operate as stated, it would be of some consequence in our domestic economy. To keep a good light at the present high price of oil is quite an item of expense, any suggestion that will put us in the way of reducing that expense, and of obtaining a good light at the same time, is worthy of consideration. Oil that could be purchased five years ago for $1-25 per gallon, now sells at $5, and the dirty whale oil that was then considered unfit for the most common use, is selling now at eighty or ninety cents, and even one dollar a gallon:

"Let all scraps of fat (including even whatever bits are on the dinner plates) and all drippings, be set in a cold place. When the crock is full, transfer the fat to an iron pot filling it half way up with fat, and pour in sufficient cold water to reach the top. Set it over the fire, and boil and skim, till the impurities are removed. Next pour the melted fat into a large broad pan of cold water, and set it away to cool. It will harden into a cake. Then take out the cake, and

put it away in a cool place. When wanted for use, cut off a sufficient quantity, melt by the fire till it becomes liquid, and then fill the lamp with it, as with lard. It will give a clear bright light, quite equal to that of lard, and better than whale oil, and it costs nothing but the trouble of preparing the fat. We highly recommend this piece of economy."

PEA WEVILS.

Few persons (says Dr. Harris,) while indulging in early green peas, are aware how many of these insects they swallow. When these pods are examined, small discolored spots may be seen within each corresponding with a similar spot on the opposite pea. If this spot on the pea be opened, a minute whitish grub, without feet, will be found therein. It is the wevil in its *larvo* form lives upon the marrow of the pea, and arrives at its full size by the time the pea is dry. The *larva* then bores a round hole, from the hollow in the centre of the pea, quite to the hull, but leaves the germ of the future sprout untouched. This insect is limited to a certain period for depositing its eggs. Late sown peas escape its attacks. Those sown after the 10th of June are generally safe.

WOOL—CLEANING AND CARDING.

The manufacturing of rolls is a very different business now, from what it was in the days of our grandmothers. Then every farmer made his own cloth, and carding-machines were as plenty as grist-mills. Now they are scarce and every day diminishes the number. Then, *clean* wool was an object, now, heft and fineness of fleece is sought. A machine could then card from two to three pounds of rolls per day—now from 40 to 60 is the extent of the capacity of even larger and better machines.

The difference is in the fineness and gum of the wool. No Merino wool can be carded into good rolls without cleansing. It is idle to expect it, and be it known that ninety nine cases in every one hundred, bad carding is the result of improperly preparing the wool. Wool is not always clean when it is washed white. *Cleansing* wool, is, *by far*, a more difficult operation than carding. Those who have wool to card had better take it to the machine to be cleaned and carded, when they have conveniences for doing it properly, The charge for cleaning will not exceed a penny per pound. Never *grease* wool till *the day* it is *carded*. Carry the grease to the machine with the wool. Grease on wool soon becomes rancid and then it is as bad as the gum and dirt on the fleece.

As some will cleanse, or *attempt* to cleanse their own wool, it may not be amiss to give some directions upon the subject. Ten years experience qualify me to say, that the following recipe will work well, with proper care. To four pails water, add four quarts of salt; heat the solution as hot as you can bear the hand in it; put in the wool loosely, say 2 lbs at once; in ten minutes it will be cleansed; squeeze out the liquid, (which is better than before for the second use,) and while the wool is warm rinse in plenty of water.

Many use soap, pound the wool, or rub it on a wash-board; this is all wrong, as such a course fulls the wool like a felt hat, and fails to remove the gum. It is difficult to convince such a practitioner that cleansing wool is a chemical process not mechanical. Soap renders wool sticky. No one need fear having his wool "dropped" if it be well cleansed. *Clean wool* is perfectly white and free from gum. Again, wool must not be left in a pile while wet, till it musts or mildews, if so, no machine I ever saw will card it well. I say again, pick out all burs, sort your wool as you want it, and take it together with the grease to the machine, and say to the carder a *cleanse and card.*" If you do so, the chances "are you will have good rolls. Perhaps others may know of a better recipe than the above.

G. T

HAMPTON, April 29, 1856.

Mr. Editor,—As the time is at hand for bugs to make their attack on Melon, Pumpkin, and Cymblin vines, permit me to make known, through your valuable paper, a remedy, a single application of which, put an immediate stop to the ravages, a host of them were committing on my vines, last Spring. The vines were sprinkled with water, well impregnated with the oder of coal tar. The bugs instantly rose from them, like a flock of black birds, and never returned. I had my Rutobaga plants, as soon as they came up, treated in like manner, and no insect attacked them.

Very Respectfully, Yrs. &c.

G. W. SEMPLE.

Three Tracts of Land for Sale.

I WILL SELL AT PRIVATE SALE THREE TRACTS OF LAND, in the county of Buckingham; in the lower end of the county, and immediately in the neighborhood of the Female Institute, containing Five Hundred Acres, two hundred of which is in original forest growth, lies well, well watered, and in an agreeable neighborhood; one Tract in the upper end of the county containing Three Hundred Acres, about fifty acres of creek low grounds upon the same, nearly all in original forest growth, and well timbered, and uncommonly well watered and abounding in springs of the very best order; one other Tract, containing Seven Hundred and Fifty Acres, heavily timbered, well watered, and nearly all in original forest growth.

Presuming that no person would like to purchase without first viewing the land, I decline giving a detailed description of the same—inviting all persons wishing to purchase to call upon me and judge for themselves, as I am determined to sell, and will sell a great bargain in the above lands.

June 1—4t ROBERT MOORE.

All persons who have made payments early enough to be entered, and whose names do not appear in the following receipt list, are requested to give immediate notice of the omission, in order that the correction may be made in the next issue :

LIST OF PAYMENTS.

From 22nd April to 23th of May '57.

Jno G Carr, Jan 1860 5 00
J T Redd, Jan 1857 2 25
H M Baker, March, 1857 1 00
Jno A Payne, Nov. 1856 1 00
A W Robbins, Jan 1857 6 00
W. L. Pannell, Jan 1857 1 00
Jas M Adams, Jan 1857 1 33
Jas Spindle, Jan 1857 6 00
Jno Tarrant, Jan 1857 3 00
Thos B Payne, Jan 1857 1 00
V Bargamin, Jan 1857 1 00
J G Cabell, May 1857 1 00
Jno E Jones, Jan 1857 4 75
Lem Turner, Jan 1857 2 00
Jos T Heuley, Jan 1857 1 00
E C Wingfield, July 1857 2 00
R D Simms, July 1856 3 00
D B Harris, Jan 1857 1 00
F Burns, Aug 1857 2 25
T C Law, Jan 1857 3 50
Geo Taylor, Jan 1857 1 00
E Wortham, Jan 1857 2 00
H C France, Jan 1857 1 00
Jno Keen, Jan 1857 2 50
R W Tunstall, March 1857 1 00
Thos Cook Jan 1856 1 00
J M Stout, July 1857 2 00
W Sandidge, Jan 1857 2 00
Jas W Conway, Jan 1856 1 00
W J Barrow, Jan 1857 1 00
Jas C Roy, Jan 1857 1 00
G Depp, Jan 1857 1 00
W H Goodwin, Jan 1857 2 25
T C Foster, Jan 1857 2 00
J R Fleet, May 1856 1 58
Wm M Shepherd, Jan 1857 1 33
Thomas S Martin, Oct 1856 1 00
Bolling Jones, Jan 1856 2 50
J N Faulcon. Jan 1856 33
Lem. Martin, Jan 1857 2 00
S B Finley, Jan 1857 1 50
W A Scott, Jan 1857 1 33
Jas L Mills, Jan 1857 1 00
H J B Clarke, May 1856 3 10
M T Campbell, Jan 1857 1 00
R T Jones, May 1857 1 00
R Harrison, Jan 1858 2 00
Jno W Watkins, Jan 1857 3 00
Jno H Watkins, Jan 1857 3 00
W Gibson, Jan 1857 2 00
W Murray. Jan 1857 1 00
Mrs R J Washington. July '56 1 00
T J Sorsby, Jan 1857 6 00
T H Walthall, Jan 1857 1 00
Jno Ruff, June 1857 2 00
F L Taylor, Jan 1861 10 00
J D Turpin, Jan 1856 6 00
H Harrison, July 1856 1 25
W P Braxton, Jan 1857 1 00
Dr. G. P. Holeman, Jan 1857 2 00
C P Moncure, " 1 00
W H Cosby, June 1856 3 25
Dr E A Solmond, Jan 1857 2 00
T J Ancrum, Jan 1857 2 00
W A Ancrum, Jan 1857 2 00
T E Graves, Jan 1857 2 25
J H Steger, Jan 1857 1 00
N Burnley, July 1856 2 50
T J McClintock, May 1857 1 00
Jno H Winston, April 1859 5 00
T T Pettus, Jan 1857 1 00
W S Peachy, March 1857 4 00
J P Wilcox, Sept 1856 3 75
T W L Fauntleroy, Jan 1857 1 00
Byrd Rogers, May 1857 1 00
Jas Woodfin, Jan 1857 2 08
W A Winfree, Jan 1857 2 50
E Boyden, Jan 1857 2 25
T G Peachy, Jan 1859 3 00
W D Leake, Jan 1858 3 50
C W Farmer, Jan 1857 1 00
Jno W Wilson, Jan 1857 1 00
Jno L Lipscomb, Jan 1857 1 00
J A F Randolph, June 1856 1 00
Ro M Whalev, Jan 1857, 2 25
C Breckenridge, Jan 1857 1 00
W Smith, Jan 1857 1 00
Dr W Selden, Jan 1857 1 00
Geo Hocker, Jan 1857 1 00
Jacob Baylor, Jan 1858 3 50
Dr J H Parrish, Jan 1857 5 00
J Overby, Nov 1856 1 25
J W Allen, Jan 1858 2 00
Thos Patterson, Sept 1857 3 50
Wm M Miller, Jan 1856 1 25
Geo W Kyle, Jan 1857 1 00
Dr J Michaux, Jan 1857 2 25
E F Baugh, Jan 1857 2 25
W B Blanton, Jan 1857 3 00
M Clarke, Jan 1857 1 00
A P Strange, July 1857 2 25
W J Robertson, Sept 1858 1 00
Wm Hall, July 1856 1 00
A B Davidson, Jan 1856 1 00
T J Massie, Jan 1857 2 00
R M Nimmo, Jan 1857 1 00
W A Sweet, Jan 1857 1 00
W G Harman, Jan 1856 2 25
J B Breckenridge, July 1856 2 25
J Kinney, Jan 1856 6 00
P Powers, April 1856 3 50
S B Brown, Jan 1856 4 75
Ro Guy, Sep 1856 2 25
Geo Poage, Aug 1856 4 75
W B Cochran, Aug 1856 4 75
J A Cochran, Jan 1855 1 25
A D Wren, Sep 1856 2 25
T. J. Michie, April 1856 1 00
W Smith, Jan 1856 4 75
J W Bell, July 1856 3 50
W B Johnson, July 1856 4 75
J D Brown, Jan 1856 3 50
R Hanger, July 1856 4 75
R B Brown, Aug 1856 3 50
B B Acord, June 1853 2 00
J M Morson, July 1559 5 00
Thos Young, Jan 1857 1 00
B W Finney, May 1857 3 00
Josiah Collins, July 1859 1 25
J F McGeorge, Jan 1856 2 00
J M Nicolson, Jan 1857 3 50
A Leyburn, Jan 1857 3 75
A S Dandridge, July 1856 1 25
W Hayward, Jan 1856 3 50
L J Chappell, Jan 1857 4 00
A H Ferguson, Jan 1857 2 00
J A B Thornton, Jan 1857 2 00
J A Thomson, July 1856 2 25
J S Nicholas, Jan 1857 3 50
Powhatan Jones, Sept 1856 1 25
G C Scott, Jan 1857 1 00
J W Backhouse, Jan 1857 2 00
W C Terry, April 1856 1 00
R Sayers, Jan 1856 2 50
V O Witcher, May 1857 1 25
P St. Geo Cocke, Jan 1857 1 00
Jno W Talbott, Jan 1857 2 00
Saml Holeman, Jan 1857 2 25
Andw Maxwell, Jan 1857 1 00
Jos B Traylor, Jan 1857 2 50
B B Saunders, Jan 1857 1 00
Jas H Buckley, Jan 1857 5 00
R D Powell, Jan 1857 1 00
J C Crutchfield, Jan 1857 4 00
W Mitchell, Jan 1857 1 00
Jno Jeter, Jan 1857 1 00
Jas D Scott, Jan 1857 1 00
B B Keesee, Jan 1857 1 00
Jas Fife, Jan 1858 2 25
Jas Davis, July 1856 1 50
Ben Hoover, " 1857 2 00
James Jones, Sept 1856 5 00
D J Hartsook, " " 3 75
P H Steenbergen, Jan 1856 5 00
Geo R Goldsborough, " 1857 2 00
G W Semple, " " 2 50
T B Davis, " " 2 00
M P Sledge, " " 2 00
P B Sledge, " " 1 00
J J Deal, " " 2 00
Geo A Bailey, " " 2 00
Jos W Booth, " " 2 00
A J Bishop, " " 2 00
Geo W Harris, July 1856 2 50
Henry Duerson, Jan 1856 2 50
H M Nelson, " 1857 2 00
W B Irby, " " 1 00
W A Dearing, Nov " 2 00
W Old, Jan 1858 4 00
Jno Aldridge, July 1857 3 00
J T Britt, April " 3 50
Jas Hobson. Nov 1856 2 50
Is O Perkins, Jan 1857 1 00
Saml M Pettit, Sept 1856 6 25
A Branch, Jan 1857 1 00
W B Murray, " " 3 25
R W Griswold, " " 1 00
Joshua Carmon, " " 1 00
P Harrison, " " 1 75
J L Davis, " " 1 00
N Walton, Sept 1856 2 50
Maj J Paxton, May 1857, 1 00
W G Maddox, Jan " 1 00
Thos Walker, " " 4 00
E B Hunter, " " 1 00
L Blanton, Dec 1856 2 00
D La Prade, Jan 1857 1 25
G J Gardner, " " 1 00
Geo E Naff, June 1856 2 87
N F Cabell, Jan 1857 3 50
V Phillips, " " 1 00
W C Marrow, " " 1 00
A A McPheters, " " 1 00
C H McCormick " " 4 75
L W Cabell, " 1856 2 50
J A Robertson, " " 1 00
P Fowlkes, " 1857 1 00
L Osburne, " " 2 75
B Osburne, " " 2 25
W D McGuire, " " 3 00
B F Garnett, " " 2 00
B W Bailey, " " 1 00
Jordan Harris, Jan 1857 1 00
W C Johnson, May " 1 00
W S Jones, Jan " 2 25
W H Tunstall, " " 2 25
O P Gray, " " 2 25
Dr J Trent, " " 3 50
N Quesenberry, " " 1 00
E J Bates, Dec 1856 1 00
B L Barrow, Jan 1857 1 00
C Wingfield, July 1856 2 50
W T Blair, Jan 1857 1 00
W Walden. " " 1 00
E J Harrison, " " 2 25
Wm Henderson, " " 2 00
T W White, " " 11 00
T J Boyd, " " 2 00
A K Fulton, " " 2 00
W O Eubank, " 1858 1 00
M Pitzer, " 1856 1 25
8 00 A T M Rust, July " 1 25
P J Fowlkes, Jan " 6 00
W P Dickinson, Nov " 1 00
Thos Whitworth, Jan 1857 2 25
R N Neblett, " 1858 2 00

T L Preston, Jan 1856	2 50	Wm Kinney, June 1855,	2 50	C S Gay, Jan 1556	1 00
J R Quarles, Jan 1857	1 00	Jno B Ayres, Sep 1856	5 00	B Wiggenton, Jan 1857	2 00
J S Perkins, May "	1 00	Hill Carter, Jan 1857	3 00	T Evans, Oct 1856	1 00
J Ruffner, June 1856	1 50	Wm Gough, " "	1 00	Wm Hughes, July "	1 25

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1. Nine-tenths of the School Books issued in this country recognize Webster as their general standard, and of the rest very few recognize *any* particular standard.

2. Ten times as many copies are sold of Webster's Dictionaries in the United States, as of any other similar work compiled in this country.

3. Where present good usage sanctions more than one mode of orthography. Dr Webster's works now present usually both forms, thus obviating any honest objection on that score.

4. Nearly every State Superintendent of Public Instruction in the Union, or corresponding officer, where such an one exists, has recommended Webster's Dictionaries in the strongest terms. Among these are those of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Ohio, North Carolina, Alabama, Louisiana, Kentucky, Indiana, Illinois, Missouri, Michigan, Iowa, Wisconsin, Minnesota, California, and including Canada, twenty-three in all. These gentlemen, occupying this high educational position, can of course exert a very commanding influence in securing that uniformity in the use of language, and in the orthography and pronunciation of words, so greatly to be desired, and to such a great degree already secured by Dr Webster's Dictionaries. His conceded pre-eminence as a definer, the convenience, simplicity, and symmetry of his system of orthography, and his scheme of pronnuciation, alike free from the extremes of affectation and vulgarity, present the strongest claims for the adoption and general use of his Dictionaries, as well by the scholar and the man of business as the pupils in our common schools and higher seminaries of learning.

☞ We have the pleasure of appending two or three official State recognitions of Webster, received, as will be noticed by the dates, during the present month. The universality of an uniform usage thus being attained, can but be gratifying to every intelligent educator who appreciates the advantage of such uniformity.

From the State Superintendent of Alabama, Wm F. Perry.

"MONTGOMERY, Ala., April 10, 1856
"Office of State Sup. Pub. Instruction.

"The high opinion entertained by me of Webster's Dictionaries, has induced me to recommend their introduction to all the public schools of Alabama.

WM. F. PERRY.
State Superintendent."

From the State Superintendent of North Carolina, Hon C. H. Wiley.

'GREENSBORO,' N. C., April 14, 1856.

'The Unabridged Dictionary of Noah Webster, revised and enlarged by Dr. Goodrich, should be among the first standard literary works bought. It is invaluable to the student; and to all who wish to become good scholars, it is the most important work on the English Language now extant. I find that Webster's smaller works of the kind are much more extensively used, * * * while his Spelling Book is on my list of works recommended, and his Unabridged Dictionary is also my preference among the higher works of this kind. A new and more convenient abridgement of Webster's large work called the High School and Pronouncing Dictionary, has made its appearance, and hence, there is not now the necessity for recommending a work not so well known to our people as those of Noah Webster.

C. H. WILEY.
State Superintendent."

NEW HAMPSHIRE.

The New Hampshire State Board of Education, at its recent meeting in Concord, March 28, 1856,

"*Voted*, unanimously, that we do recommend * * * * WEBSTER'S SERIES OF DICTIONARIES, as standard textbooks in the schools of this State, *to the exclusion of all others.*

JONA TENNER.
Sec'y N. H. Board of Education."

G. & C. MERIAM, Springfield.
HARPER & BROTHERS, New York.
MASON & BROTHERS, New York.
D. APPLETON & CO, New York.
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Sold by J. W. RANDOLPH.
June 9—1t Richmond, Va.

GRAIN CRADLES.

Cosbys, Grants Wire Brace, and Saunders Superior Grain Cradles, Grass Scythes, and a general assortment of Agriculture implements to suit the season.

Agricultural Peas of several kinds for sale by
June 1—1t WM. PALMER.

CONTENTS OF NO. VI.

Essay on Irrigation, ... PAGE 161
Gapes in Chickens, ... 172
Circular Self-Acting Gate, ... 173
Preparing Food for Farm Stock, ... 174
To Delinquent Subscribers, ... 177
Sale of Devon Cattle, ... 178
The Guano Convention, ... 178
Use of Kelp as Manure, ... 181
The New Esculent Root, ... 181
Princess Alice Maud Strawberries, ... 182
Guano Attachment to the Wheat Drill, ... 182
Gardening for the South, ... 182
Mr. Crenshaw's Land for Sale, ... 183
The Wheat Crop, ... 183
Harvest, Drink, Diet and Medicine, ... 183
Hay Covers, ... 184
Half-Bred South Downs, ... 185
What Pennsylvania Farmers Pay Annually for their Horses, ... 185
Tidegate, ... 186
Hollow Horn, ... 187
A Herd of Heavy Cattle, ... 188
Number of Members of the Agricultural Society of Virginia, ... 188
Cheap Oil for Kitchen Lamps, ... 189
Pea Wevils, ... 190
Wool—Cleaning and Carding, ... 190

THE

SOUTHERN PLANTER.

No. 6. ADVERTISING SHEET. JUNE, 1856.

THE LAW JOURNAL.

Shall the first attempt to establish a legal periodical at the South be the last?

J. W. RANDOLPH, *Bookseller, Richmond,*

Has given the lawyers of Virginia and other Southern States an opportunity of deciding that question, and now is the time for all who feel an interest in the success of the work to subscribe. The first number is just out, and here is the verdict of the "press."

It is gotten up in handsome style. The editor, A. B. Guigon, Esq., a young member of the bar of this city, whose ability and industry are abundantly proved by the first number.—*Richmond Dispatch.*

We hail the advent of this Journal as an epoch in the jurisprudence of the South.—*Wheeling Intelligencer.*

We can say with entire candor, that we believe it worthy the support of the legal fraternity.—*Savannah (Daily) Journal.*

It is a work superior in every respect to any of the Northern Law periodicals with which we are deluged, and should take precedence of them.—*Norfolk Herald.*

Members of the Bar say "if you can sustain the Journal as the present number presents itself it must become indispensable to the bar." We intend to do it.

Private Correspondence of Henry Clay.

Octavo Volume of 650 *Pages. Price—To Subscribers* $2 50.

This work contains 600 letters, embracing besides Mr. Clay's letters from Madison, Monroe, Marshall, Crawford, Webster, Taylor, Brooke, Lafayette, and other distinguished men.

VIRGINIA POLITICS.

A History of the Political Campaign in Virginia, in 1855; with a Portrait and Sketch of the Life of Gov. Wise. Price $2 50.

Notice from the Examiner.

It is not only a valuable book of reference and depository of facts and arguments for the Democratic politician; but a most interesting picture and history of that celebrated campaign. It contains also an appendix, compiling much documentary information in regard to the prominent questions now before the people of the Union.

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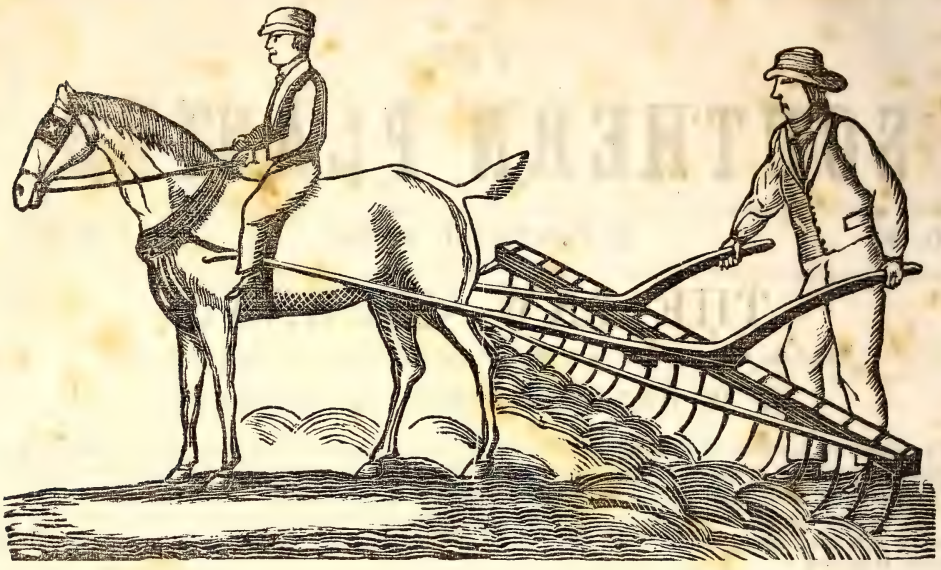


DEWEY'S PATENT GLEANER,

WITH HAYNES' IMPROVEMENT.

PRICES.

26 *Teeth*, 8 *feet long*, ... $10 00,	28 *Teeth*, 8¾ *feet long*, . . . $10 50,
30 *Teeth*, 9½ *feet long*, ... 11 00,	39 *Teeth*, 12 *feet long*, ... 15 00.

Having purchased the right to manufacture the above represented Wheat Gleaner in Richmond, with privilege of selling the same in Eastern Virginia, with the exception of the counties of Fauquier, Loudon, Madison, Orange, Green, Albemarle and Louisa, I take this method of soliciting your order for as many as you may need for the coming harvest.

I feel fully assured that I am advancing your interest to a far greater extent than my own, by urging the importance of this article to your attention. No farmer who makes wheat on 20 acres of land can afford to be without one. So sanguine am I, that you cannot dispense with the Gleaner after you have once used it, that I am willing to send you one, subject to be returned to me, if after a fair trial, it is not found as represented.

Binders need not carry hand rakes, nor use extra efforts to secure scattering wheat, as the Gleaner will secure every head, and may be used with safety over rolling, rocky, stumpy and uneven land, at the rate of about 20 acres a day.

Under favorable circumstances, when used after cradles, it will save more than cost each day it is used.

It will save more wheat, following the revolving wood rake, than that rake will the first time going over the ground. No farmer that I know, or can hear of, who has once used one would dispense with it for three times its cost. Independent of its value as a Gleaner and hay rake, it is invaluable for raking in clover, grass and other small seeds. See Southern Planter, March, 1856, and June, 1855.

☞Please order at once, to give time to forward the Gleaners before harvest and prevent the many disappointments occurring in harvest.

My Threshing Machines are now so prominently before the public, that I need only refer to them and call particular attention to the fact that they have so far excelled other machines, as to secure all the premiums of the Virginia Agricultural Society at their exhibitions in 1853, 1854 and in 1855, although each year brought in competition with all the prominent machines manufactured in this and the Northern states. This is also true of the Pitt's Patent Thresher and Cleaner which I am manufacturing in a superior and improved manner with steel axles and self oiling boxes.

This is the best Thresher and Cleaner in the estimation of the most experienced, and being perfect in itself and mounted upon wheels can be put to work in any field in one hour without any previous preparation, and the wheat may often be threshed and secured in bags with less labor than is expended in hauling it a mile to a stationary machine. My improved horse power which attracted so much attention at the Fair of the Virginia Agricultural Society last November, at which time it received the first premium, is adapted to any machinery and has many advantages worthy of particular attention. The horse wheel is 7½ feet diameter, securing plenty of motion. It requires no digging to secure it for working —may be connected with thresher by geer, avoiding all annoyances of slipping bands, breaking strings, &c., and is equally well adapted to the use of bands if preferred. Any farther information will be given if desired.

H. M. SMITH.

Richmond, Va. may tf

Reaping Machines.

As heretofore, I am supplied with Hussey & McCormick Reapers with all late improvements. Those who are seeking information, will please address me by mail and they will receive full particulars, terms, &c.

may 2t H. M. SMITH.

VALUABLE FARM

IN ORANGE COUNTY

FOR SALE AT AUCTION.

AS my business engagements in Richmond are such as to prevent me from giving that attention to my farming operations that they require, I have determined to sell my farm in Orange Co, at auction,

On THURSDAY, 17th July next.

HAWFIELD

is situated in one of the most healthy, fertile, and in all respects, desirable sections of Virginia, being immediately at the foot of the Southwest Mountains, and less than five miles from the Rapid Ann Station on the Orange and Alexandria Railroad, also within a few miles of the Plank Road from Orange Court-House to Fredericksburg. It contains, by recent survey, 950 acres, of which 600 are cleared and in a high state of improvement. The whole of it is set beautifully in Orchard grass, Timothy and Clover. A large portion of the tract is branch meadow land, and as both bottom and high land is very productive of grass, there can be raised a very large quantity of hay and stock.

It is well watered, having seven constant running streams on it, and is capable of being divided into fourteen fields of 40 to 50 acres each, with water in all of them.

There is no waste land on the tract. All that is not cleared is in original growth of timber, and much of it might be cleared with much profit by a tobacco grower. As the railroad from Fredericksburg, now being constructed, will pass within a mile of the wood land, the timber could be turned to a good account.

The buildings are commodious, and in excellent order. They consist of a large framed

DWELLING HOUSE,

with basement, which, if finished off, would give ten rooms. A few years ago it was painted and put in complete repair.

Large Stable, Barn, Corn House and Negro Cabins in good order, to which I have added recently a shelter covered with shingles, 100 × 50 feet, with large hay loft above, and cattle shelter 100 feet long, affording every convenience for the protection of stock, provender, implements, &c. &c.

My operations at HAWFIELD for the past seven years have been with a view to a steady and permanent improvement of the land, and I think its present condition will show that I have not been unsuccessful. Besides having over two hundred bushels of wheat seeded, I have had on the farm for the past year nearly 1,000 head of sheep and a good stock of cattle, which shew that it is well adapted to grazing.

It is rarely that a farm in such a condition, and having such advantages as HAWFIELD, is offered in market. The fences are in excellent repair. The land is entirely clean and in fine heart, clear of bushes and rock, and can be cultivated with as little labor and large profit as any other tract of its size. It is, therefore, in a condition to pay a profit at once, and as I am determined to sell, I invite all who wish to purchase a farm, desirable as a place of residence and profit, to examine it previous to the day of sale.

TERMS.

One-fourth cash, balance in equal instalments of 1, 2 and 3 years, with interest from the day of sale, or, if more desirable to the purchaser, other terms might be agreed upon.

Mr. John S. Graves resides at HAWFIELD, and will take pleasure in showing the farm to any one who will visit him.

WM. G. CRENSHAW,
Richmond, Va.

June 1—2t

LAND FOR SALE.

THE subscriber intending to move West, offers her Land for sale, containing 300 acres. It is divided into three shifts, each under a good fence; containing a never failing Spring in each shift. There are all the necessary and convenient houses (which are new.) One-third of the tract is excellent wood land and well timbered.

There is a fine creek running through this Farm with 25 or 30 acres of flat land in cultivation. It is located 12 miles from Prince Edward Court-House, 10 from Charlotte Court-House, 9 from the Southside Railroad at Pamplin's Depot, and 12 from the Richmond and Danville Railroad. A more minute description is deemed unnecessary, as those wishing to purchase will examine for themselves.

PAULINA P. DUPUY.

June 1—3t*

LAND FOR SALE.

THE subscriber wishes to sell his Farm in King William County, about 20 miles from Richmond, adjoining the land of Capt. Martin Drewy and others. It is a very healthy location, and a desirable neighborhood, contains 300 or 400 acres, a large portion of it is very superior Swamp Land, part of which is drained and in cultivation, and the balance easily drained and cleared up. The high Land lies well, and is well adapted to the culture of Corn, Wheat, &c. It has on it a good DWELLING HOUSE, with six Rooms, and all necessary out houses. Persons wishing to purchase will address the subscriber at Charlottesville, Albermarle County, Virginia.

THOS. J. VALENTINE.

June 1—tf

SUP. PHOS. LIME.

WE have established in this city a manufactory for pure Sup. Phos. Lime, warranted to be made of pure bonedust, not boiled or calcined, the Northern article of bone dust not enter into our composition. Our price will be $40 per ton cash, contained in from 7 to 8 barrels, according to the weight. Soils also analyzed. Address

DUVAL & NORTON,
Druggists and Manufacturers, Richmond, Va.

June 1856—1y

J. R. KEININGHAM,

DEALER IN

BOOKS & STATIONERY,

No. 226, Broad Street, Richmond, Va.

BOOKS bound in every variety of style, and Blank Books made out the best material at short notice. Clerks of Courts and others will find their orders thankfully received, and executed well and promptly, at strictly moderate prices.

June 1856—1y

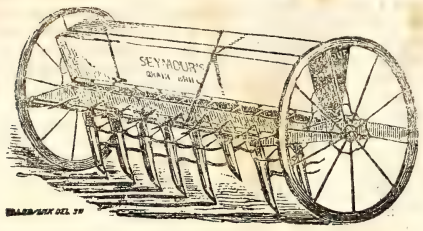
DANIEL H. LONDON.

Corner Main and 13th Streets,

IMPORTER.

KEEPS always for sale the best Negro Clothing of English and domestic makers AT THE LOWEST PRICES. The farmers and planters will find it to their interest to examine his stock. Silk carpets, blankets and of all kinds of seasonable goods, for sale in quantities to suit the buyer. au tf.

SEYMOUR'S IMPROVED PATENT
GRAIN DRILL.



THIS Machine is capable of sowing all coarse grain and all fine seed commonly sown by Farmers, from corn and peas down to the smallest seed, such as clover, timothy and other grass seeds, either broadcast or in Drills, and while it is the best Drill for wheat, rye, oats, barley, &c., it is just the thing to drill in fine dry fertilizers before putting in the seed—or, these fertilizers may be mixed with the seed, and all deposited in the ground together.

Its reputation has been in advance of all other drills for the last six years, in the State of New York, and it has six times taken the first prize bestowed on Grain Drills by the Agricultural Society of that State, including the highest prize and diploma, at the great trial of implements made by that Society at Geneva, in 1852. It is one of the most simple in its construction and machinery, as well as the most convenient and durable of all Drills; and without disparaging others, it is believed to be better adapted to the various purposes for which such a machine is wanted, than any other implement known in America; and its value is greatly increased from the fact that it is converted into a Broadcast Sowing Machine, merely by removing the drill teeth and conducting tubes, which can easily be done in five minutes. A recent improvement which prevents the shrinking and swelling of the wood from affecting the correctness of its operation, also adds much to its value.

Another and still more recent improvement called,

SEYMOUR'S GUANO ATTACHMENT,

Is expressly intended to meet the wants of those who wish to drill fine fertilizers into the ground with the grain, but prefer to keep such fertilizers in separate compartments till discharged from the box, when both seed and fertilizers will pass together through the same drill tubes into the ground. There is therefore but little room for those who are well posted in relation to grain drills, to doubt that this is the cheapest, as well as the

BEST GRAIN DRILL IN THE WORLD!

They are usually made with nine teeth, eight inches apart. The wheels are high, and the draught so light for a team, that those with only seven teeth are now seldom ordered, while there is an increasing demand for those with eleven teeth; therefore those with nine and eleven teeth are the only sizes kept on hand—but any other size, and those with teeth any other distance apart, will be made to order.

The Machinery is remarkably simple, permanent and easily kept in repair, and all the part are so clearly presented to the view of the operator, that he can readily see if anything is not correct; and the grain falls from the seed box to the tubes (a space of several inches,) in full view, so that in passing over a field, he may be constantly assured that the seed is deposited as designed.

The teeth are all placed in one rank, unless ordered to be put in two ranks. It is believed by those who have made experiments, and given the subject their careful attention, that the evils caused by lumps, stones, &c., being thrown by the teeth in the hind rank into the furrows made by the teeth in the front rank, are in most cases far greater than the advantages gained. This fact has induced the inventor to construct his double-ranked drill so that the teeth can all be placed in one rank, at pleasure, thus obviating in this drill the objection to all other two-ranked drills. The price of the drill with teeth in two ranks, is five dollars higher than those with teeth in but one rank.

If required to sow Plaster, Guano, or any other fertilizer, a Feeder should be added, for these are very apt to be damp, and if slightly damp, the Feeder is useful.

If required to sow grass seed, WHILE BRILLING, a light broadcast "seeder" is added, with which any seed, from wheat to the smallest seed, can be sown in front of the drill teeth, and is slightly covered by them. Clover and Timothy mixed is readily sown with this, and it is conveniently guaged to any desired quantity per acre. To convert it into a Horse Hoe, for hoeing drilled grain, a set of Horse Hoes, with shanks, like the shank of the drill teeth. With these additions or "Extras," it is capable of sowing grass seed, hoeing drilled grain, and sowing plaster, ALL AT ONCE. The Machines are designated by number as follows:

No. 1,	9 tooth,	$90 00
No. 2,	do. with Feeder,	96 00
No. 3,	do. do. and Grass Seeder,	111 00
No. 4,	11 tooth,	100 00
No. 5,	do. with Feeder,	106 00
No. 6,	do. do. and Grass Seeder,	121 00
No. 7,	9 tooth, with Guano Attachment,	110 00
No. 8,	do do. and Grass Seeder,	120 00

They are made under the superintendence of the patentee and inventor, and we design to make every machine in all respects as it should be, believing it will contribute to our own interest so to do, and that if we put in bad work or poor materials, the injury falls heavier upon ourselves than it can upon the purchaser.

We omit hundreds of certificates and recommendations of the most encouraging nature from the most reliable sources; and for reference will only add the names of the following most reliable gentlemen:

Isaac Newton, . . Philadelphia, Pa.
Wm. Hadley, . . . Dansville, N. Y.

A. Griswold, . . . Dansville, N. Y.
E. C. Patterson, . . . Portage, N. Y.
H. Howard, ... Lavonia, N. Y.
P. P. Barnard, . . Richmond, N. Y.
H. G. Hall, ... do.
Welford, Eastham & Co., Fredericksburg, Va.
Rob't W. Carter, . . . do.
Rowlette & Hardy, . . Petersburg, Va.
Thos. Branch & Sons, . . . do.
D. D. T. Moore, Ed. R'l N. Yorker, Rochester.
H. Munson, P't of 2 Ag. So., E. Bloomfield, N. Y.
E. M. Bradley, Sec. of 2 Ag. So., do.
Ira Peck, Pres. town Ag. So., do.
T. H. Kellog, Jr., Sec. town Ag. So., do.
Guy Collins, ... do.
N. Steel, ... do.
M. Adams, ... do.
Dea. Pomeroy, . . . do.
Luther Munson, . . . do.
G. North, ... do.
H. W. Hamlin, . . . do.
Moses Eggleston, . . do.
Hiram Steel, ... do.
Wm. Carter, ... do.
F. N. Toby, ... do.
Ten Eyck Munson . . . do.
J. W. Taylor, . . . do.
Ferd. Beebe, ... do.
Frank Beebe, . . . do.
Rufus Humphrey, . . . Victor, N. Y.
M. Norton, ... do.
Levi Boughton, . . . do.
Wm. Boughton, . . . do.
J. C. Culbertson, ... Genesee.
Hon. T. C. Peters, ... Darien.
Calvin Sperry, ... Gates.
A. Van. Bergen, P't N. Y. S. Ag. So., Coxsackie.
Hon. C. H. Carrol, ... Groveland.
L. Bradner, Pres. Bank of . . Danville.
H. Keeler, ... S. Salem.
W. B. Bowerman, ... Scottsville.
J. A. Gillis, ... Farmington.
J. Lattaurette, ... Waulden.
S. Howard, Ed. Cultivator, . . Boston.
Rev. C. Cory, ... Lima, Ia.
E. S. Gilbert, ... Moline, Ill.
H. Pitts, ... do.
Hon. D. R. Burt, . . . Potosi, Wis.
A. S. Lenoir, . . . Louden, Tenn.
Col. Castle, ... Cheshire.
F. W. Fenner, ... Camillus.
S. F. Norton, . . . Springwater.
B. R. Adams, . . . Tecumseh, Mich.
E. Boughton, . . Battle Creek, do.
D. B. & G. C. Burham, . do. do.
Linus Cone, ... Troy, do.
E. Bradley, . . . Waterford, do.
C. B. Seymour, . . . Scio, do.
S. G. Patterson, . . . Marengo, do.
G. Dryer, ... do. do.

Printed directions for using accompany each Machine. Those who desire further information will please address the inventor, P. Seymour, or the subscriber, at East Bloomfield, Ontario Co., New York.

feb—tf. C. H. SEYMOUR.

THE FARM JOURNAL
AND
PROGRESSIVE FARMER.

As our rule is to make all subscriptions begin with the January or July number, now is a suitable time for those wishing to commence with our next issue to subscribe. The subjects treated of, will be found to comprehend all that are calculated to inform and interest the Farming community. The series of articles we have just concluded "on the application of Guano, and its present and ulterior effects upon the soil" by Dr. A. A. Hayes of Boston, is unquestionably one of the most able contributions ever made to American Agricultural literature. Our aim is to make the Journal new, useful and entertaining. Each number has thirty-two octavo pages, is unexceptional in its typographical appearance, and is illustrated with four or six engravings of improved implements or stock. The editorial department is under the control of DAVID A. WELLS, A. M., author of "the year book of Agriculture." The annual of Scientific Discovery, &c., &c., assisted by A. M. SPANGLER, the original editor and proprietor of the Journal. We can furnish the back numbers to such as would prefer having their subscriptions *commence with* the present volume. Monies may be sent at our risk. Specimen numbers sent gratis.

OUR TERMS OF SUBSCRIPTION PLACE THE JOURNAL WITHIN THE REACH OF ALL:

Single Copy		$1,00 per annum
Five Copies	4,00	" "
Ten "	7,50	" "

CASH INVARIABLY IN ADVANCE.

SAMUEL EMLEN & Co., Publishers,
North-east corner 7th and Market Streets,
Philadelphia.

To whom all communications whether editorial or business should be addressed.

June 1, 1856.—1t

CRENSHAW & CO.
Commission Merchants and Grocers.

North side of the Basin,
RICHMOND, VA.

Pay particular attention to the sale of Wheat, Flour, Tobacco, and all descriptions of produce. Keep on hand a large assortment of *Groceries, Genuine Peruvian* and *Mexican Guano* all of which they will furnish on the best terms.

☞ They continue their Wool Depot for grading and selling Wool to which they invite the attention of the Growers in this State.

June 1, 1856.—tf

Board in the Country Wanted.

The advertiser wishes to procure Board for the summer for his family, consisting of his wife, two small children and a servant, with occasional board for himself, at some pleasant and healthy place of easy access on the line of the Richmond and Fredericksburg, the Virginia Central or the Orange and Alexandria Rail Road. Address "Southern Planter," Richmond, Va., stating terms, &c.

June 1, 1856—tf

ATKINS' AUTOMATION;

OR,

SELF-RAKING REAPER AND MOWER.

BEST MACHINE IN USE.

1 (*the first*) *used in* 1852.
40 *used successfully in* 1853.
300 *in twenty different States in* 1854.
1200 *in all parts of the Union in* 1855.
3000 *building for the harvest of* 1856!

THERE ARE SIX GOOD REASONS FOR THIS UNPARALLELED INCREASE AND GREAT POPULARITY;

1st. It is strong and reliable, and easily managed. 2nd. It saves the hard labor of raking. 3rd. It saves at least another hand in binding. 4th. It saves shattering by the careful handling in raking; besides, the straw being laid straight, it is well secured in the sheaf, and does not drop in the after handling, and the heads are not exposed in the stack, so that the *grain* saving even exceeds the *labor* saving. 5th. It is a good Mower, being one of the best convertible machines in use. 6th. It has a knife that does not choke.

Its other excellencies, too numerous to mention here, are fairly given in the circulars. Its intrinsic worth is also attested by the award (mostly in only three years) of

Over Seventy First Premiums.

PRICE—Reaper and Mower $200, $75 on its receipt; $75 1st September, and $50 1st December. Price of Self-Raking Reaper only $175. Considerable saving in freight to those at a distance who order prior to 1st March; also liberal discount for advance payment.

To secure a machine, order immediately.—Though so little known the past season, and none ready for delivery, till 1st May, yet not two-thirds the customers could be supplied.—The reputation of the Machine is now widely established, so that three thousand will not as nearly supply the demand as twelve hundred did last year, and we shall also be selling four months earlier.

Order early, if you would not be disappointed.

Pamphlets giving impartially the opinions of Farmers, together with orders, notes, &c., mailed to applicants and prepaid.

Write to us at Chicago, (Ill.,) Dayton, (Ohio,) or Baltimore, (Md,) which ever is nearest to you.

J. S. WRIGHT & CO.
"Prairie Farmer" Works, Chicago.

March, 1856.—4t

MORRISON'S REAPER,

MANUFACTURED AND FOR SALE BY

WM. E. MORRISON & MOORE,

PETERSBURG, VA.

We learn that a factory has been established in the City of Petersburg for the purpose of manufacturing the Reaping Machine patented by Robt. J. Morrison of this city. A model of this machine was exhibited at the late State Agricultural Fair. It attracted the attention of thousands of our best farmers, and received the commendation of the Committee on Reapers.—The report of this committee was published in the December number of this paper. Those who desire to purchase this implement, should, without delay, address Messrs. W. E. MORRISON & MOORE, Petersburg, whose advertisement will appear in the next number of this paper.

[*Southern Planter.*

Extract from report of Committee on Reapers:

"They would call the attention of the Society to a new Reaper and Mower, a Virginia invention, patented by Robert J. Morrison, of the City of Richmond, differing in some important respects from others, which, after a careful examination, they believe will prove a valuable machine. Among other improvements they would mention the covering and protection of the driving power from dirt, &c., preventing wear and tear and clogging. The facility with which it can be thrown out of gear, the peculiarity of the gear, the upper lid having a slight vertical motion, but no lateral, forming scissors without a pivot, cleaning the cutter, and at the same time opposing a cutting edge to the cutting edge of the knife," &c. ap—3t

Improved Sup. Phos. Lime.

THE subscriber continues to manufacture the above at his Bone Mill, near the city, and having appointed Messrs. BRANCH & Co., Richmond, and T. BRANCH & SONS, Petersburg, agents, all orders addressed to them will be promptly attended to. His price is $40 per ton, and the quality is fully equal to any manufactured out the State. Those in want would do well to order soon, that none may be disappointed. Annexed will be found one out of many certificates. R. R. DUVAL.

CERTIFICATE.

Having used R. R. Duval's Super. Phosphate of Lime both on Corn and Wheat, I am much pleased with its effects, and take pleasure in recommending it. I consider it equal, if not superior, to any manufactured out of the State.

J. LUCIUS DAVIS,
March 1856.—tf Henrico, Va.

Agency for the Purchase and Sale of Improved Stock.

STOCK CATTLE of all the different breeds, Sheep, Swine, Poultry, &c., will be purchased to order and carefully shipped to any part of the United States, for which a reasonable commission will be charged.

Apply to AARON CLEMENT, Philadelphia.

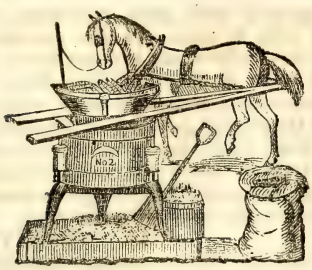
Refer to Gen. Wm. H. Richardson, Richmond, Virginia.

N. B.—All letters (post paid) will be promptly attended to. ap '53.—tf

Pure North Devon Stock.

SEVERAL Bull and Heifer Calves, of unquestionable purity of blood, for sale, deliverable at Tolersville, on the Virginia Central Railroad. Terms reasonable. Address

Dr. P. B. PENDLETON, Tolersville,
April '56.—tf Louisa County, Va.



OBBINS & BIBB

PROPRIETORS OF

THE BALTIMORE STOVE HOUSE

AND MANUFACTURERS OF

SCOTT'S PATENT LITTLE GIANT CORN AND COB MILL.

Patented May 16, '54—Copyright secured March 1, '55.

NOTICE.—LITTLE GIANT—Any infringement of the patent of the Little Giant Corn and Cob Crusher, either by selling into our territory, or attempting to infringe the patent, will be prosecuted to the utmost extent of the law.

ROBBINS & BIBB,
Light Street, near Pratt, Baltimore.

TOWN AND COUNTY RIGHTS FOR SALE.

LITTLE GIANT.—The subscribers having secured the right from Lyman Scott to manufacture and sell the Corn and Cob Mill, known as the Little Giant, are now prepared to execute promptly, in a thorough workmanlike manner, all orders, wholesale and retail, of said Mills. The reputation won by these Mills for the past year throughout the United States is a sufficient guarantee of its utility and established character. It has cost a large amount of money and labor to bring the Mill to its present state of perfection, and is now offered to the Planters, Stock Feeders and others as a complete article of mechanism, simple and practical in use, durable in construction. It is pronounced by every body to the most important article of the kind now in use, not only well adapted for grinding cob meal for stock, but grits of fine hominy for the table, &c. The Little Giant received the first premiums at the late Agricultural Fairs of Missouri, Kentucky, Maryland and other States, and that in the most complimentary manner. These Mills are guaranteed in every respect. The No. 1 Mill is warranted to grind eight bushels of feed per hour with one horse, and offered at the *low price of* $30, No. 2 Mill at $40, grinds 10 to 12 bushels per hour, with one horse, No. 3 Mill at $50 grinds 15 to 18 bushels per hour, and No. 4 Mill at $60 grinds 20 to 25 bushels per hour with two horses. Less 5 per cent. for cash.

[Extract from a Western Paper.]

THE LITTLE GIANT PATENT CORN AND COB MILL.—We would call the attention of the farming community, or those who have stock to feed or fatten, to the above mill, confident that all who consult economy and practice good husbandry, will avail themselves of the use of an implement, the merits of which have been tested by leading Agriculturists throughout the Union. "The Little Giant," quoth one of our townsmen, "is no Yankee tool, but begotten in the South-west, at St. Louis, Mo., born and bred in the biggest corn-field of the biggest corn of the great American bottom—hence its natural proclivity and rapacity to chaw up ear corn and to do things wholesale after the western fashion." We notice in the Agricultural papers from that quarter, and all along shore, that the Little Giant has ground its way from the Mississippi to the Atlantic, taking the first premiums at State and County Fairs and Mechanics' Institutes of Missouri, Illinois, Indiana, Kentucky, Ohio, Pennsylvania, Carolinas, Virginia, Georgia, New Jersey and Maryland; and has now got right among the down easters, masticating the hard, flinty corn of that country to their infinite delight and satisfaction.

An Agricultural Improvement of the South-west, that the invention and skill of the East acknowledges superior to any thing of the kind got up, and is sought after by the intelligent discerning farmers of that region, must have substantial merits. Indeed, to commend itself to those who are so well qualified to judge, who from their circumstances and education, are led, if not compelled, to practice an economy in all the operations of the farm, which would appear with us to amount almost to stinginess, must combine advantages that adapts it in the highest degree to meet the purposes intended.

Messrs. ROBBINS & BIBB, of the Baltimore Stove House, 39 Light street, we understand have the patent right for some ten or a dozen States.

BLENHEIM, near Carter's Bridge P. O.,
Albemarle Co. Va., Oct. 5, 1855.

Messrs. Robbins & Bibb, Baltimore:

Gentlemen—I mentioned to you when in your manufactory last year, that I would give my opinion of the Little Giant Corn and Cob Crusher, after I had made a fair trial of the one sent me, this I now proceed to do, as an act of justice to all interested in its success. I have had it in operation a year and find it quite equal to my anticipations, if not beyond them. With two mules it will crush well upwards of fifteen bushels of corn on the ears in the hour, easy work. If needful it might be made to reach 18. It adds *one-fifth to the amount of food*, to say nothing of the toll saved for grinding at a neighboring mill, four miles off, and the service of a man and a pair of oxen the entire day each trip. Indeed I can safely say, that it has saved me in the last twelve months *four-fold its cost*, with corn at $5 and $6 a barrel, sold for in this neighborhood. I intended getting a machine to crush Guano this fall, but was disappointed, and I made an experiment with the Little Giant, and found it to answer admirably. With one horse it ground or crushed 15 to 20 bushels in the hour, and did it well. I shall of course save the price of the crusher. Upon the whole, I regard it as a most efficient and valuable machine, and

with pleasure add my testimony in its favour. How long it will last, is to be proved.

Very respectfully, your ob't serv't,
A. STEVENSON.

—

Correspondence of the Cincinnati Daily Gazette.

MANSFIED, Nov. 10, 1855.

Quite an excitement was created here this afternoon, growing out of a contest between corn crushers. It appears that some two weeks since Messrs. Scott & Hedges, of Cincinnati, advertised in the papers of this city that they would give a silver cup to any mill that should grind faster and finer, with the same amount of power, than their mill the "Little Giant."

They appeared in due time upon the ground, with two sizes of mills. The Leavit mill, or Excelsior as it is called, was entered in competition by Messrs. Hall & Allen, who are manufacturing them in this place. Mr. Leavitt, the patentee, was present, and superintended the operating of his mill, who at first was unwilling to have the trial made with old dry corn. Mr. Hedges who exhibited the Little Giant, insisted on using the old corn, as he was unwilling to have only a partial test, which would be the case if soft, new corn was used. Finally, after much hesitation, they yielded to Mr. Hedges' demand. The grinding commenced with the Little Giant, which ground a given quantity of corn in sixty-three revolutions, using two light horses on the No. 4 mill, which moved off easily and ground the amount without stopping. A half bushel of meal was sifted and about one quart of the amount was found too coarse to pass through the sieve. The committee who had been appointed to superintend and decide the contest, then repaired to the Leavitt mill, when the same amount of corn was ground, which required 73 revolutions, although Mr. Leavitt worked but one horse, which was a very heavy stout one the draught was evidently too hard for him, as he stopped three times and was allowed to rest. On sifting the meal there proved to be five or six quarts too coarse to pass the sieve, instead of one as in the cases of the Little Giant. The committee after a few moments consultation reported substantially as above, and returned the cup to Mr. Hedges, who thanked them kindly, and remarked that it twice before had been won over the Leavitt mill, and if a favorable occasion offered it would be risked again. Mr. Hedges then called the attention of those present, saying that he would grind some shelled corn—then put one bushel in the hopper, which was ground out in four minutes at a moderate walk. Mr. Leavitt ground a like quantity and was five minutes—his horse being hurried to considerably more speed—no sieve was used, but it was admitted by all that it was much coarser than that ground by the Little Giant.

Mr. H. then, at the request of some farmers, ground some new corn very satisfactorily. Mr. Leavitt ground some also, which appeared very fine, but upon taken the mill apart, it was found to be gorged with cobs, admitting only the shelled corn to pass. In the opening of the contest the Little Giant had but few friends, all seemed to be in favor of "Our Mill," but the earnestness and assurance with which Mr. H. pressed the contest gained for it friends, although at one time there was a semblance of hostile demonstration, which our good people soon quieted, and the matter ended quite pleasantly and the Little Giant came off triumphant.

AN EYE WITNESS.

☞ The Little Giants are to be had of Messrs. ROBBINS & BIBB, Baltimore, Md. myl

RIDGWAY SCHOOL.

THE next session of my School will begin on the first Monday in September and end on the last Friday of June, 1857. There will be a vacation of two weeks at Christmas. I charge $220 for a whole session, or $25 a month for any period less than a whole session. I furnish my pupils board, lodging, fuel, washing, and make no extra charges for anything except lights. I have three assistant teachers, and am prepared to give instruction in every branch of education proper to fit boys to enter the University of Virginia. For further particulars apply to me at Charlottesville, Va.

FRANKLIN MINOR.

June 1—tf

DRAINING TILE.

THE subscribers have constantly on hand any quantity of DRAINING TILE of the most approved patterns, which they will dispose of at the following prices: 1½ inch bore $12 per thousand, about one foot bore each; 2½ inch bore $15; 4 inch bore $35; Gutter Tile $20. They also keep on hand the best Sand Press Brick, $15, and Fine Brick, $25. Samples can be seen. Orders left at the office of American Farmer, or direct to the subscribers.

RITTENHOUSE & CRAWFORD,
Brick Makers, W. Pratt St., near the
jan—tf Cattle Scales, Baltimore, Md.

Southern Clothing House,

AT

RICHMOND, VA.

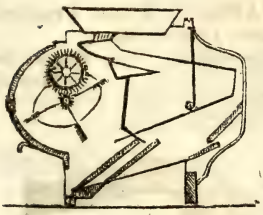
THE Subscriber keeps constantly on hand a large and Fashionable Assortment of Ready made Clothing, of his own manufacture, of the latest and most approved Styles. Also a large assortment of Gentlemen's furnishing Goods, such as Handk'fs, Cravats, Neck Ties, Shirts, Drawers, Gloves, Suspenders, Collars, Umbrellas, &c., &c.

In addition to which he keeps a large and general assortment of Piece Goods of every Style and Quality, which he is prepared to make to measure at the shortest notice and in the best and most fashionable style.

E. B. SPENCE,
mayly No. 120, Corner of Main & 13 sts.

DOUBLE SCREENED ROCKAWAY.

The Great Premium Fan still Victorious.



Invented and Manufactured by J. MONTGOMERY & BRO., at No. 155 North High Street, Baltimore.—Patented Dec. 20th, 1853, and June 9th, 1855. This Fan has taken the first Premium at all the leading Agricultural Shows of Virginia, Maryland and North Carolina. We have never been beaten since we improved our Fan, and we do not think that there is any Fan in the United States that will do its work as fast and clean as our Rockaway. They are worked easy, are very simple, can be rigged for cleaning by an intelligent farmer, are very durable, and when out of order can be repaired with great ease by any mechanic, and they are adapted to cleaning all kinds of grain. We have had ample opportunities to test our Fan, during the present harvest, with several of the latest improved Fans, and our experience is, that we can clean nearly, if not quite, as fast and clean as any two of them in the same time. We think we know what the farmer wants and needs, and that our experience enables us to suit them better than any other person in the Fan business, and they may rest assured that no pains will be spared to give them the best machine in the market. Our Fan has gained its present popularity entirely in consequence of its merits—our sales have increased 50 per cent. in our old districts, showing that those sold heretofore have given full satisfaction. We have sold over 550 Fans this season, and 750 will not more than supply the demand from present appearances. It is an easy matter to puff up an article before the public, through the Journals as some have been this season, but for a Fan to retain its popularity, and to increase in demand, as ours has done in the same counties and districts for 3 and 4 years, is the best evidence of its value. Our sales are extended over six States, namely: Maryland, Virginia, North Carolina, South Carolina, Delaware and Georgia. Having secured Letters Patent for our Fan in 1853 and 1855, we are now prepared to sell Rights for any State or County not mentioned above. We offer a good chance to any enterprising mechanic who desires to go into business—a business that can be started on a small capital and yield as fair profit as any we know of. We will give all the Patterns and any instruction requisite.

Our Fans, delivered on board the vessel in Baltimore, cost $34. All orders by mail as promptly attended to as if made in person.

It is deemed almost unnecessary to give certificates or references, as to the superior qualities of our Fan, as they are so universally known, but for the information of those who have not as yet used them, we subjoin the following:

CHARLES COUNTY, Md., 1855.

We have tried Montgomery & Bro's improved Double Screened Rockaway Fan, and find it to be the best we have ever seen. It cleans cleaner, faster, and works better, in general, than any we have ever tried. We recommend it to all our friends.

JOHN WISE,
SAM'L CARRINGTON,
JOSEPH YOUNG,
JOS. H. COOKSEY.

This is to certify that I purchased of Messrs. J. Montgomery & Brother, one of their Wheat Fans, the 17th of July, 1852, and I consider it an excellent fan. It is now fanning wheat this day, and I think it is as perfect as when I first purchased it, except the usual wear and tear, I would recommend them to the public.

DAN'L NEWNAM.

ROCKFIELD, Nelson Co., July 23, 1855.

Messrs. J. Montgomery & Bro.

I am more than pleased with your Rockaway Fan; had I obtained yours in time on my last year's third and inferior qualitied wheat, (the remnant) I could have saved $150.

H. N. COLEMAN, SR.

All orders addressed to the undersigned, at Baltimore City (Md.) Postoffice, will be promptly attended to. J. MONTGOMERY & BRO.
155 N. High St., between Hillen
ap 1856—1y and Gay, Baltimore.

Mowing and Reaping Machines.

ALLEN'S CELEBRATED REAPING & MOWING MACHINES.—These never clog, and can be worked on rough and stony surfaces. Wright's Reaper with Atkins's Self-Raker; Manny's, McCormick's and Hussey's Reapers, Ketchum's Mower, and all other good machines.

ALLEN'S Superior Horse-Power and Thresher; also Bogardus's, Emery's, Hall's, Taplin's, and several other kinds.

Agricultural and Horticultural Implements, a very large and complete assortment; Field and Garden Seeds of all sorts; Peruvian Guano, Superphosphate of Lime, Bone Dust, &c.

R. L. ALLEN, 189 and 191,
mar—4t* Water St., New York.

SHELL LIME.—I have for sale, and will keep constantly on hand, at my lime kilns, near Capt. Goddin's tavern, on Bacon Quarter Branch, a large supply of the best quality of Shell Lime. Farmers and others in want of this article, can get their orders filled by applying at my kilns or addressing me through the city post-office.

Ap'56—1y JOHN MOSS.

LEWIS HILL,
PRODUCE COMMISSION MERCHANT,
ATTENDS TO THE SALE OF
Wheat, Flour, Corn and Tobacco,
OFFICE ON GOVERNOR (OR THIRTEENTH) STREET,
RICHMOND, VA.

dec 1—1y

AYER'S PILLS.

FOR ALL THE PURPOSES OF A

FAMILY PHYSIC.

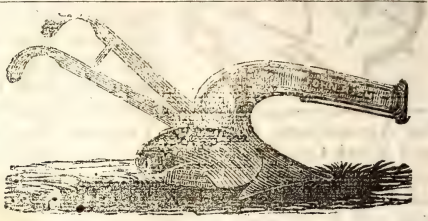
There has long existed a public demand for an effective Purgative Pill which could be relied on as sure and perfectly safe in its operation. This has been prepared to meet that demand, and an extensive trial of its virtues has conclusively shown with what success it accomplishes the purpose designed. It is easy to make a physical Pill, but not so easy to make the best of all Pills—one which should have none of the objections but all the advantages of every other. This has been attempted here, and with what success we would respectfully submit to the public decisions. It has been unfortunate for the patient hitherto that almost every purgative medicine is acrimonious and irritating to the bowels This is not. Many of them produce so much griping pain and revulsion in the system as to more than counterbalance the good to be derived from them. These *Pills* produce no irritation or pain, unless it arises from a previously existing obstruction or derangement in the bowels. Being purely vegetable, no harm can arise from their use in any quantity; but it is better that any medicine should be taken judiciously. Minute directions for their use in the several diseases to which they are applicable are given on the box. Among the complaints which have been speedily cured by them we may mention Liver Complaint, in its various forms of Jaundice, Indigestion, Languor and Loss of Appetite, Listlessness, Irritability, Bilous Headache, Bilious Fever, Fever and Ague, Pain in the Side and Loins, for in truth, all these are but the consequence of diseased action of the liver. As an aperient, they afford prompt and sure relief in Costiveness, Piles, Colic, Dysentery, Humors, Scrofula and Scurvy, Colds, with soreness of the body, Ulcers and all impurity of the blood; in short, any and every case where a purgative is required.

They have also produced some singularly successful cures in Rheumatism, Gout, Dropsy, Gravel, Erysipelas, Palpitation of the Heart, Pains in the Back, Stomach and side. They should be freely taken in the spring of the year, to purify the blood and prepare the system for the change of seasons. An occasional doze stimulates the stomach into healthy action, and restores the appetite and vigor. They purify the blood, and, by their stimulant action on the circulatory system, renovate the strength of the body, and restore the wasted or diseased energies of the whole organism. Hence an occasional dose is advantageous even though no serious derangement exists; but unnecessary design should never be carried too far, as every purgative medicine reduces the strength when taken to excess. The thousand cases in which a physic is required cannot be enumerated here, but they suggest themselves to the reason of every body; and it is confidently believed this pill will answer a better purpose than any thing which has hitherto been available to mankind.

For minute directions see the wrapper on the box.

Prepared by Dr. JAMES C. AYER, Practical and Analytical Chemist, Lowell, Mass.

☞ Price 25 cts per Box. Five Boxes for $1. May 3t



AGRICULTURAL WAREHOUSE.

The subscribers are prepared to receive Orders for all kinds of Agricultural Machines and Implements of the latest and most approved patterns, which will be made of the best materials and of superior workmanship. They ask attention to "Cardwell's Double and Single Geared Horse Powers and Threshers," which have taken a premium at every fair at which they have been exhibited. Also, "Croskill's Clod Crusher;" Manny's Patent Reaper and Mower," the best in use; Fawke's Patent Lime and Guano Spreader, highly approved; Whitman's Corn Planter, a superior machine; Rich's Patent Iron beam Plow, of various sizes, &c. They subjoin the opinion of the Hon. Wm. C. Rives of these Plows.

BALDWIN, CARDWELL & CO.

Richmond, Feb. 27th.

Castle Hill, Dec. 15. 1854.

Col. Wm. B. Stoughton:—Dear Sir: I take pleasure in recording here my impressions of the performance of your Plow (Rich's Iron-beam Patent) at Cobham to day. The work was far more thorough and complete than that of any plow I ever saw in operation before. The furrow opened by it was very generally 13 inches deep and about 20 inches wide in hard close land, and most effectually and perfectly cleaned out, none of the sod earth falling back into it.

The trial of the plow was witnessed by many of my neighbors, among whom I will mention Messrs. Frank K. Nelson, J. H. Genell, J. H. Lewis, C. B. Hopkins, Thomas Watson, of Louisa, &c., all practical men and most excellent judges of agricultural implements, and there was but one opinion among them as to the superiority and unexceptionable performance of your Plow.

Wishing you equal success elsewhere in making this valuable implement favorably known to our agricultural brethren, I remain yours, truly, WM. C. RIVES.

Extract from a letter from a farmer in Amherst County, dated March 14, 1856.

I have this evening made a trial of the Plow you sent me. It meets my highest expectations, too much cannot be said in its praise. Ap 1y

THE LITTLE GIANT,

Far in the Lead of all Competition.

Scott's Patent Little Giant

CORN AND COB MILL.

Has undergone a trial and test for nineteen months and better, and testimony is daily coming in from innumerable witnesses speaking from experience, and confirming what the public press has already said in its behalf, proving that after a constant use for the above period of time, *it exhibits no perceptible appearance of wear.* In view of these facts we are prepared to say to our friends and customers generally, that we will give them a full and unqualified guarantee, and as a proof of our earnestness in the matter, we ask permission to give you one upon trial, and if you are not perfectly satisfied after thirty days use of the same, that it is far superior to, and will last much longer than any other Mill for a like purpose now in use, you are at liberty to return it, and the money will be refunded without one cent of discount or deduction.

The particular properties and qualities of the Little giant, which place it far in the lead of all competitors, have been claimed for some of the latter in a sort of quack nostrum advertisement, upon the principle, we suppose, that it is quite as proper to trade on borrowed *merit* as on borrowed *capital.* The same advertisement has stated that *Cast Iron* Mills for grinding Corn and Cob will not last more than two years, and that the cost for keeping them in repair for ten years will be equal to four times their original cost. Very possibly this may be the case with some Cast Iron Mills, but it certainly is not so with the *Little Giant,* as the following facts will make apparent to every reader of ordinary intelligence.

Mr. Scott, the patentee, has secured by *letters patent* a double set of arms in the top of the mill, (or what he terms a driver and arms,) for the purpose of more effectually pulverising the Cob and preparing it for the centre of the Mill, which very materially lessens the strain on both Mill and team. In the *common* Mills now in use—*such for instance, as we find in borrowed plumage in advertisements*—this double set of arms, or driver, cannot be used without a direct infringement upon Scott's Patent, consequently the strain is so very great upon the periphery and fine grinding surface of the Mill, that it will last but a very short time and necessarily requires a ring (or some additional part) to keep them in working order; and if they require one ring, which is upon the shell of the Mill, they will just as surely require another upon the *cone* (or burr) which is more liable to wear out than the shell.

Again, in some of these *common mills* the legs are made very slight and *cast fast to the* Mill; hence in the event of a leg being broken, it requires an entire new shell to replace it, which will be one half the price of a new Mill. Not so, however, with the Little Giant. Mr. Scott has also secured by *letters patent,* what he terms a pocket, on the side of the shell of the Mill, so that in the event of a leg being broken either by accident or design, it can be immediately replaced by the most ordinary farm hand and at a very trifling cost; hence we are prepared to prove beyond all controversy, that the expense to run the Little Giant for ten years will not be as much for repairs by one half, as any other Mill now in use, from the fact of the simplicity attending any repairs that it might require, added to the durable properties of its inner arrangement with its double set of arms and immense grinding surface. The amount of work it can do with a comparatively small power, the superiority of its work when done, and its capability of being managed by the most *unskilful farm hand,* places the Little Giant a head and shoulders above any similar invention, and entitles it to be recognized as the *Goliah* among Corn and Cob Mills. Conductors of public journals, who have seen it in operation by the side of others, and all farmers who have had it in use for any time, proclaim it to be the only effective and reliable Mill for grinding Corn and Cob ever invented. At a time like this, when the products of our farms and fields command a high price, and when it is important that the farmers should save as much grain as possible for the markets of the country, no one engaged at farming, or who may have stock to feed, should be without one of these Mills a single week. A trial is all that is necessary to show that it possesses advantages over all other similar Mills now in use, and to commend it to universal favor.

MANUFACTURED AND FOR SALE BY

ROBBINS & BIBB,

Warehouse 39, *Light St., Baltimore, Maryland,*

OR BY

THOMAS BRANCH & SONS,

AND

ROULETT & HARDY,

Petersburg, Virginia.

CERTIFICATE.

Philadelphia, December 13, 1855.

Messrs. SANDS & WORTHINGTON,

American Farmer, Baltimore.

GENTLEMEN:—

We notice in the columns of your very valuable paper, an *interested,* one sided statement of the Trial of Corn and Cob Mills at the late Fair of the Maryland Agricultural So-

ciety, and thinking it hardly fair that the impressions which are intended to be conveyed by the author of the advertisement, should go broad cast to the entire farming community without some comment, we have taken it upon ourselves to give what we deem and what dozens of disinterested persons will bear us out in asserting to be a fair and disinterested statement of that trial, and we call upon the examining committee, Messrs. M. T. Goldsborough, and E. B. Calbert, to confirm our statement. The first thing that drew our attention to the trial was the appearance of the gentlemen (committee) at the location of the Excelsior or Leavitt's Mill, (which we must admit ground very prettily,) having two horses attached; the committee then went to the Scott's Little Giant, (or Messrs. Robinson & Bibb's Mill,) which required one minute and a quarter longer to produce the same amount of meal, some one present said that the trial was hardly fair with but one horse. The remark was then made, inasmuch as the Excelsior was grinding green corn with two horses, and the little Giant was grinding hard flinty corn with but one horse; the committee having satisfied themselves of that fact, requested Mr. Leavitt to try the hard corn, which was assented to, and the hard corn put in, and at the second revolution the sweeps flew all to pieces, the corn being entirely too hard for it. This induced the committee to postpone their examination until the next morning, with the request that each Mill should be tried with the same corn. Then came the trial referred to, and feeling some curiosity in the matter, we made our appearance upon the ground in good time to witness it. The commencement was with Mr. Maynard's Champion Mill, which produced a half bushel measure half full of meal in five minutes, requiring twenty revolutions with but one horse. Then came the Excelsior, which produced about the same amount of meal in three minutes and a quarter, requiring ten revolutions with two horses. Then came the Little Giant, which produced about the same quantity in four minutes, requiring fifteen revolutions, with but one horse. Then came Mr. Colburn's Mill, which produced the same amount of meal in eight and a quarter minutes, requiring thirty-two revolutions also with one horse. We were under the impression that the Little Giant led the van, but there is the statement, and a disinterested community can judge for themselves. [jan tf] EDMUND MAHER.

SAMUEL S. COTTRELL,
SADDLE AND HARNESS MANUFACTURER,
Wholesale and Retail,
No. 118, *Main St., Richmond, Va.*

Having received the first premium at the Fair of the Virginia Mechanics' Institute, in 1854, and a Silver Medal at the Fair of the same Institute in 1855, feels confident he can please all persons in want of any article in his line. March 1856—1y

DOMESTIC ANIMALS AT PRIVATE SALE.

L. G. MORRIS' Illustrated Catalogue, with prices attached of Short Horned and Devon Bulls and Bull Calves, a few Horses, Southdown Rams, Berkshire, Suffolk and Essex Swine, will be forwarded by mail, if desired, by addressing L. G. MORRIS, Fordham, Westchester County, N. Y., or N. J. Becar, 187, Broadway, N. Y. It also contains portrait, pedigree and performance on the turf of the celebrated horse "Monarch," standing this season at the Herdsdale Farm. je—tf.

Great Reduction in the Price
OF
HATS AND BOOTS!

From 15 to 20 per cent saved by buying from J. H. ANTHONY, Columbian Hotel Building.

Moleskin Hats, of best quality, $3,50; Moleskin Hats, of second quality, $3,00; Fashionable Silk Hats, $2,50; Fine Calfskin Sewed Boots, $3,50; Congress Gaiter Boots, $3,35; Fine Calfskin sewed shoes, $2,25.

J. H. ANTHONY has made arrangements with one of the best makers in the city of Philadelphia to supply him with a handsome and substantial Calfskin sewed BOOT, which he will sell at the unprecedented low price of THREE DOLLARS AND A HALF. ap'56—1y

INFORMATION FOR THE PEOPLE.

To be sold, fifty thousand, will be published about the first of March, Price fifty cents, Three Copies for one Dollar,

A NEW MAP OF VIRGINIA.

Upon which are delineated its vast Works of Internal Improvements, and all information usually found on Maps of the latest date; accompanied with a Pamphlet containing a register of the various Officers of the Commonwealth, Members of Congress, House of Delegates, &c., &c. Also the

Constitution of Virginia, and the
BILL OF RIGHTS.

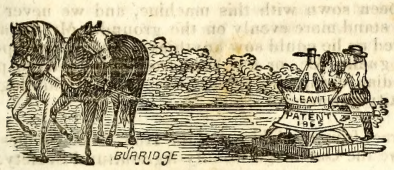
With a vast amount of valuable information indispensable to every citizen of the Commonwealth.

Published by RICHARD EDWARDS, No. 157, Main Street, Richmond, Va.

Persons wishing a copy of the New Map, will please forward their orders without delay, so as to secure a first impression. Send Post Office Stamps instead of Silver change; a gold dollar can be inclosed to any part of the country. Orders can be sent direct to the Publisher,

RICHARD EDWARDS,
Richmond, Va.

Or THOMAS BAILIE, 12th street, Richmond, Va., and copies will be forwarded at once. fetf



C. Leavitt's Patent Excelsior CORN AND COB CRUSHER,

YOUNG AMERICA!

A WESTERN INVENTION.

The above cut represents a valuable improvement in Portable Grain Mills which are now required and found so profitable in the improved modes of feeding stock. It is well known in the Western States, that the Farmers of this country are indebted to Mr. Charles Leavitt, of Quincy, Ill., for the successful introduction of a machine for grinding Corn and Cob. Machines for this purpose have long been in use, but were attended with too much labor and expense to render them profitable.

In the year 1852, after expending much time and money, he invented and patented a machine for this purpose, which has proved almost invaluable to the Farmer; and since the great success of this invention, various machines have been introduced into our markets, such as the "Star Mill," "Little Giant," &c. &c., for the same purpose. Mr. Leavitt being the original inventor of this kind of machine, and from a long experience, finding that all of them had some defect, he again went to work to improve the defective parts, and in February, 1855, he patented another Mill, which has proved to be far superior to them all. It was fairly tested at the Ohio State Fair in October, 1855, with the "Little Giant," "Star Mill" and others, and was awarded the highest Premium, and is pronounced far superior to all others. This Mill is set on three legs, cast solid to the inner Plate or Cone of the Mill, which is considered proof against breaking by the draft of the horses, thus making the inside Grinder stationary while the concave or outer Grinder revolves by means of a double lever which applies the power directly where required, with the least possible loss by friction.

The large teeth or cob breakers are set as near the centre of the Mill as possible. The fine teeth are inserted on moveable rings, which can be cast thin of hard metal, and if ever worn out can be readily replaced by new ones in five minutes time, at a trifling expense compared with the cost of pecking stones.

This Mill is furnished with two sets of fine teeth, (and others can be furnished at any time at a cost not exceeding $3 per set,) one set for Crushing and Cob Grinding, and the other for Grinding fine meal for family use.

This Mill has also a very simple and convenient arrangement for receiving and conducting the meal out at a spout on one side of the Mill, which will enable the operator to set a box under and receive the meal without the trouble of shoveling it up.

The adjusting apparatus is simple and effectual and is worked from above without interfering with the operation of the Mill; by it the Mill is made capable of application to a vast range of purposes, as well as being made to grind coarse or fine as desired.

Among the uses to which this Mill is adapted are the following, viz: Grinding and Crushing Corn and Cob together, Grinding meal from Corn and other grain, and other like purposes.

This form of Mill is so simple in its construction, and so few in its parts, that it can be furnished at a very low price, when the value of the services it performs is considered; and for the same reason it is durable and not likely to get out of repair.

It is a well known fact among scientific Farmers, that two bushels of corn ground is worth three in the ear, to feed hogs or cattle, and will fatten either in one third less time.

Price $50—including an extra set of Grinding Plates, which renders it equal to two entire Mills for $50, and new plates can be furnished at the small cost of $3 per set, which can be attached in the same manner that new points or shares are put to a plough when the old ones are worn out.

Trial of Corn and Cob Mills, at the late Fair of the Maryland Agricultural Society.

The following table will show the time occupied and number of revolutions of each of the mills on exhibition, in grinding half bushel of corn and cobs.

	Minutes.	Revolutions.
Excelsior Mill,	2½	10
Little Giant Mill,	4½	15
Maynard's Champion Mill,	5	20
Colburn's Mill,	7½	32

Advantages of the Excelsior Mill over all others.

1st. Great strength and durability. 2d. Simplicity—having only one set screw to graduate the quality of grinding, which renders it so simple that it may be managed by any ordinary farm hand. 3d. It will grind more Corn, or Corn and Cob, in the same time, and of same quality, than any other Mill in use. 5th. Economy—that part of the mill which is most liable to wear being separate from the main body of the machine, can be renewed when worn out, at the small cost of $3. Thus, in the Excelsior Mill we present the best, cheapest and most durable Mill ever offered to the Farmer.

The above Mills are now manufactured and for sale by TALBOT & BROTHER, Shockoe Foundry, Cor. 19th and Cary Streets, Richmond, Va.

☞All orders punctually attended to, and circulars and further information furnished by

R. McLAGAN,

dec 1—10t. 157 Main St., Richmond, Va.

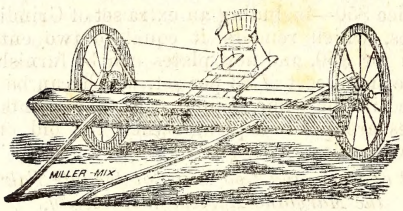
C. GENNET, Watchmaker & Jeweler, 149 west Main St., Eagle Square, Richmond. Watches and Clocks repaired and warranted. sep 24 1y

PIGS OF IMPROVED BREED FOR SALE. I have for sale, to be delivered at weaning time, a good many pigs of improved breed. I have produced it myself from crosses of the Surry (or Suffolk) genuine Berkshire, (Dr. John R. Woods' stock) Irish Grazier, Chester County, no Bone and Duchess. I think them superior hogs of medium size, and for fourteen years they have not had a bad cross among them. I prefer that purchasers should view my brood sows and my boar on my farm, three miles below Richmond. I will not sell them in pairs, because the in-and-in breeding would depreciate the stock at once and cause dissatisfacton, but I will sell in one lot several of the same sex.

☞Price $5 per head for one, and an agreed price for a larger number. They will be delivered on the Basin or any of the Railroad Depots free of charge.

FRANK G. RUFFIN.

Summer Hill, Chesterfield, May, 1856.



SEYMOUR'S

IMPROVED PATENT

Broadcast Sewing Machine.

This Machine was patented in 1845, and ten years have proved it to be unequalled in the United States, for the purposes for which it is designed.

It has but very little machinery, hence, when well made, it is very durable. It is capable of performing as follows: it sows correctly (and any desired quantity per acre,) all the various kinds of grain and seed commonly sown by farmers, from peas to the smallest seeds (Clover and Timothy mixed,) if desired, and all the fertilizers or manures of a dusty nature, which are so nearly reduced to a powder that the largest particles will pass through an aperture which will let through peas or corn, or which, having once been ground or made fine, and become lumpy by exposure, as plaster frequently does, can readily be reduced to powder by the action of the "plaster rod," which is a kind of coarse sheet iron saw, which is used in the machine, for distributing all such manures.

It is capable of dusting every inch of ground on an acre of land with less than half a bushel of plaster, and thirty or forty bushels of lime may be thus evenly applied to the same amount of land. It sows ten feet wide, and any narrower breadth may be sown at pleasure, merely with a "rod" with only teeth enough on to sow the breadth desired. It has received the highest recommendations from many hundreds of the best farmers of our country, and received twelve premiums from Agricultural Societies, besides the highest Prize and Diploma at the trial of Agricultural Implements, held at Geneva, July, 1852.

[The following is from the Albany Cultivator of June, 1848, by the Editor, L. Tucker.]

"This cut represents Seymour's Sowing Machine advertised in our last. It has been extensively used in Western New York, and is much approved. We saw many acres of various kinds of grain on the farm of John Delafield, Esq., near Geneva, last season, which had been sown with this machine, and we never saw grain stand more evenly on the ground. Mr. Delafield assured us he could sow anything—lime, plaster, poudrette, guano, &c., or any seed, from grass seed to peas, or Indian corn, with perfect exactness graduating the quantity per acre to a pint."

[Extract from an Address of the Hon. Geo. Geddes, before the Onondaga County Agricultural Society.]

The sowing of plaster by hand is a very unpleasant piece of hard work, and it is by far the best economy to use one of Seymour's machines. With these machines the plaster is evenly distributed over the whole ground and for this reason a smaller quantity of plaster is required to touch every part of the surface.

[From Ed. Southern Planter, Va., April, 1855.]

Seymours Patent Broadcasting Machine.—We again call the attention of our subscribers to this machine. Since the last number of the Planter was published we have sowed with it one hundred acres in oats, and they are now up. We never had a crop so well seeded or that promised better.

As to the quantity of work it will do, we can only state our own experience. One horse works the machine with perfect ease, it being no heavier than a single gig. The driver in our case, was so engaged that he could not get to the work sooner than an hour by sun, and had to leave it about the same time in the evening. We had four three-horse harrows in the field and a three-horse plough to sweep the water furrows. The land required only one harrowing to get it in order, the tilth upon the fall and winter ploughing being remarkably fine. Dividing the work of preceding and following the Machine, as occasion required, so as to keep all the work well up together, we found that it was perfectly able to keep ahead of them. It sows a breadth of ten feet as fast as a horse can walk, and carrying two bushels at a time, does not require as many stoppages as are necessary with a man who seeds by hand and can carry a much less supply with him. The seeding, too, is entirely independent of the wind, and was done with us as well during very high winds, which prevailed most of the time, as during a calm, because the seed are delivered so close to the ground We not only recommend the machine, therefore, to every farmer, but we urge them to buy it, not on Mr. Seymour's account, who is nothing to us, but on their own.

Albemarle, Va., March 7, 1855.

I purchased one of Mr. Seymour's Plaster Sowers in 1854, and it was used by myself and a neighbor in sowing thirty or forty tons of Plaster. I purchased another in the fall of 1854, and am now using both. One hand with an ordinary horse can sow, without difficulty, twenty to twenty-five acres a day. The distribution is as perfect as possible. I am certain that every square inch of an acre was dusted by one third of a bushel. My neighbor Mr. F. K. Nelson thinks he effected it with one peck. I cannot speak too highly of this machine as a plaster sower, It sows timothy seed and clover. I have not tried it with wheat, but feel assured it will answer well. T. J. RANDOLPH.

Fredericksburg, Va., Oct. 19, 1855.

To Messrs. WELLFORD, EASTHAM & Co.

Gentlemen:—At your request I with pleasure give you my opinion of Seymour's Patent Sowing Machine, which I have used with perfect satisfaction for two years past, in sowing wheat. I last year sowed with one of these machines 300 bushels; it sows ten feet wide and distributes the seed with perfect regularity over the surface at any rate you may desire to the acre. The quantity is indicated by an index, to which a pointer is attached, and a small boy capable of filling the box with wheat and driving so as not to vary much from the track of the machine, can manage it as well as a grown person. The grain is not affected by windy weather. I think I can safely recommend the machine to the Agricultural community.

Very respectfully, your obedient servant,

ROBERT W. CARTER.

They are all made under the supervision of the inventor, and it is intended that every machine shall be made as it should be; for we are well aware that if we allow bad work or materials, the evil is greater to ourselves than to the purchaser. The price with all improvements made previous to 1845, is $55. In July, 1855, an improvement was patented which when applied increases the price to $60. Since that time another very valuable improvement has been perfected; and with these late improvements, the value of the machine to the purchaser is nearly or quite doubled, while the price is only increased to $65. Another box, placed behind the wheels, will be furnished to order at $25. With this, grain or seed may be sown while sowing some other seed or substance from the main box. This can be removed or replaced in five minutes.

Reference is made to all the Presidents of the New York State Agricultural Societies who have presided since 1845, and as they are in use by intelligent farmers in half the States in the Union, as well as in Canada, we would refer to all these gentlemen to testify to their excellence:

S Sands & Worthington,	Baltimore, Md
D C Randolph,	Richmond, Va
C R Mason,	King George C H
C C Baldwin,	Richmond
S S Henley,	Walkerton
Erasmus Taylor,	Meadon Farm
E H Osborne,	Petersburg
Edward Hill,	Ayletts
Dr W Gwathmey,	"
Samuel Ayres,	Richmond
D A Claiborne,	Halifax Co
W R Bland,	Nottoway
N M Osborne,	Prince George
E Brown,	Wichomico Ch
W S Rylands,	Ayletts
J T Henley,	Walkerton
R B Watkins,	Mechanicsville
W Y Downman,	Smithfield
F G Ruffin, Ed. Southern Planter,	Richmond
Miles C Selden,	Powhatan
W T Samuel,	Ayletts
R M Bridges,	Brandy Station
R P Atkison,	Dinwiddie
J P Taliaferro,	York Co
R B Haxall,	Richmond
T J Randolph Jr.,	"
Dr P B Pendleton,	Tolersville
Dr James L Jones,	Gordonsville
Lewen T Jones,	Loudoun Co
Hon T C Peters,	Darien
W B Bowerman,	Scottsville
H Munson, Pres't two Ag Soc,	E Bloomfield, N Y
E M Bradley, Sec,	do
Ira Peck, Pres't town Ag Soc,	do
T H Kellog, jr, Sec town Ag Soc,	do
Guy Collins,	do
N Steel,	do
M Adams,	do
Dea. Pomeroy,	do
Luther Munson,	do
W J Taylor,	do
G North,	do
Hiram Steel,	do
W Carter,	do
F N Toby,	do
Moses Eggleston,	do
Ten Eyck Munsen,	do
Rufus Humphrey,	Victor, N Y
M Norton,	do
Levi Boughton,	do
D D T Moore, Ed. Rural New Yorker,	Rochester
W Kelly, Pres't N Y A S,	Rhineback
L G Morris, Pres't N Y S A S.	Mt. Fordham
A Van Bergen, Pres't N Y S A S,	Coxsackie
Hon C H Carroll,	Groveland
L Bradner, Pres't Bank f	Danville
H Keeler,	S Salem

C. H. SEYMOUR.

East Bloomfield, Ontario, N. Y. 1856. fe tf

DEVON CATTLE.—The subscriber's second annual Catalogue of DEVON CATTLE is now ready, and will be sent by mail to those desiring it. It embraces full pedigrees of all his herd, including his *three* imported Bulls, his imported Cows, and their progeny. Several superior Bulls and Heifers are offered for sale.

Also ESSEX PIGS bred from the best importations. Address,

S. WAINWRIGHT,

my5—5t* Rhinebeck, Duchess Co., N. Y.

SEYMOUR'S
CELEBRATED SOWING MACHINES.

THE subscribers having been appointed sole Agents in this City, for the sale of the above celebrated Machines, are now prepared to execute orders for them, which should be sent in early to avoid disappointment.

BALDWIN, CARDWELL & CO.

Richmond, May 1st, 1856—4t

MANNY'S IMPROVED REAPER AND MOWER.—We beg to call the attention of Planters to this Popular MACHINE, which has no superior; we solicit early orders to avoid disappointment, as we are making a limited number of them.

BALDWIN, CARDWELL & CO.

April 16, 1856.—3m

THE PATENT MAGIC CORN AND
COB CRUSHER.

WE have been appointed sole Agent here for the sale of this *MACHINE*. It will grind from 10 to 15 bushels per hour of sufficient fineness for Cattle. It is not liable to get out of order, and is much more durable than any other of its kind that we have knowledge of. We recommend it with confidence.

BALDWIN, CARDWELL & CO.,

may-6t] 148 *Main Street, Richmond.*

LIME—LIME—LIME.
To Farmers, Bricklayers and Others.

HAVING made arrangements for a regular supply of Shells, I am prepared to furnish any quantity of well burnt Shell Lime, as low or lower than can be procured elsewhere. It will be delivered to farmers at any of the railroad depots, and to customers in the City wherever they may desire.

Application to be made at my Lime Kilns, opposite Tredegar Iron Works, at Mr. John G. Werth's office, corner 10th Street and Basin Bank, or at Messrs. Smith & Harwood's Hardware Store, Main Street, Richmond.

Jan. 1856.—1y WM. SMITH.

MACFARLANE & FERGUSSON,
BOOK, JOB, FANCY and ORNAMENTAL
PRINTERS,
LAW-BUILDING, Franklin Street,
RICHMOND, VA.

The following works are printed at their office:

The Southern Literary Messenger.
The Southern Planter.
The Quarterly Law Journal.
The Home and Foreign Journal; and
The Commission. my '56.—tf

Southern Female Institute.

Richmond, Va,

THE Principals of the Southern Female Institute, with this announcement of its 7th session, tender their thanks to the Public for their liberal and increasing patronage they have received at its hands.

As this Institution has its origin in individual enterprise and has been fostered neither by aid from the State, nor by denominational influence, it is with pride that they point to the appended list of patrons, believing as they do that it evinces the estimation in which their labours in the cause of female education are held by men of eminence and high character.

The Principals are Virginians, and were educated in Va. They selected teaching for a Profession and have devoted themselves earnestly to it for a number of years in their native state. Relying upon the support of the Southern people they established, six years ago, this Institution, Southern in every feature and in all its teachings. No expense has been spared to make it worthy of patronage, and they hope to be supported in the effort to make the South independent of Northern schools and teachers.

The Boarding Department will hereafter be under the immediate and sole control of D. Lee Powell who has taken a large new house on the South-East corner of 1st and Franklin Streets, for the purpose of accommodating a number of young ladies as Boarders.

The Principals are determined that the opportunities offered for acquiring a thorough knowledge of the French and other modern Languages in their school, shall be equal to those of any institution in the country. One or more Parisian ladies will reside in the family of Mr. Powell, who will be required to converse habitually in French with the Boarders.

The most experienced and accomplished teachers of music, vocal and instrumental, in the city will be employed, and every effort will be made to secure improvement in this valuable accomplishment. It will be the duty of one of the teachers to see that the music scholars practice regularly and *properly*.

TERMS.

Board for 9 mos., washing and lights extra.....$200,00
Music on Piano, Harp or Guitar at Professors charges, Tuition in English.....$50
Preparatory Department $40
Modern Languages in classes each.....$20
Drawing and Painting each from.....$20 to $50
Use of Piano per month.

We beg leave to refer to the following list of patrons who have now or have had daughters in the Institution.

His Excellency, Henry A. Wise, Gov. of Va.
Lieut. M. F. Maury, Nat. Observatory Washington.
Dr. Beverley R. Welford, Richmond.
A. A. Morson, Esq.
Conway Robinson.
James Lyons.
Joseph R. Anderson.
P. R. Grattan;
Revd. Chr. H. Read.
Revd. Geo. Woodbridge.
Hon. A. R. Holladay.
Col. Geo. M. Munford.
Charles Ellett, Jr.
Col. H. B. Powell, Loudoun Co., Va.
Revd. P. Slaughter, Warrenton.
R. E. Scott, Esq.
P. St. Geo. Cocke, Powhatan Co., Va.
Richard Baylor, Essex.
Wm. H. Clark, Halifax.
J. R. Edmunds.
Mr. J. R. Harrison, Lower Brandon, Va.
Hon. Geo. H Lee, Clarksburg, Va.
Thomas B. Barton, Esq., Fredericksburg.
Thomas F. Knox, "
Dr. A. H. Mason, Falmouth.

For further information, apply to Principals.

D. LEE POWELL. }
R. J. MORRISON, }

Richmond, June 1, 1856.—tf

THE SOUTHERN PLANTER.

RICHMOND, JUNE, 1856.

TO ADVERTISERS.

THE SOUTHERN PLANTER having a large circulation in *Virginia and North Carolina* and a very respectable subscription list in the other *Southern and Western States*, offers one of the best mediums to advertisers that the State affords. Those who take it are almost exclusively farmers, substantial men who live in the country; the best customers to every trade, (except the lawyers,) the very class whom advertisers desire to reach. To BOARDING SCHOOLS AND ACADEMIES, THE HOTEL KEEPER, THE DRUGGIST, THE DENTIST, THE NURSERYMAN, and in short to all who have anything to sell or anything to make known, the "*Southern Planter*" is recommended with confidence not only on account of the high character of those who subscribe to it, but likewise by the fact that it possesses the additional advantage of being printed in *Book form and stitched*, it is therefore more apt to be preserved than an ordinary newspaper, which gives to advertisers a better chance of keeping themselves before the people.

The increased business of this department of the "*Planter*" since it has been undertaken proves that those who have tried it, find it to their interest to encourage the enterprise.

ADVERTISEMENTS

Will be inserted at the following rates:—For each square of ten lines, first insertion, One Dollar; each continuance Seventy-Five Cents.

Advertisements out of the City must be accompanied with the money to insure their insertion.

L. G. MORRIS'S

Auction Sales of First Class

Improved Breeds of Domestic Animals,

To take place at MOUNT FORDHAM, on the 24th and 25th days of June, 1556.

The Seventh Annual Catalogue, illustrated with celebrated and Prize Animals, and fully descriptive of each lot to be sold, as to ages, pedigrees, &c., will be ready for delivery on or about the 25th of May. and will then be forwarded to all my *present* stock correspondents, and to as many others as may desire it.

L. G. MORRIS.

Mount Fordham, Westchester Co., N. Y.
May 9, 1856. je 1—1t